

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Amendment of the Commission's Rules to
Establish Part 27, the Wireless
Communications Service ("WCS")
GN Docket No. 96-228

NOTICE OF PROPOSED RULE MAKING

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By the Commission: Commissioner Quello issuing a statement.

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I. INTRODUCTION

1. By this action, we propose to establish a new Wireless Communications Service ("WCS") in the 2305-2320 and 2345-2360 MHz bands. We also propose to award one or more WCS licenses by competitive bidding using multiple round electronic auction procedures. We further propose to permit the WCS licensee to provide any fixed,¹ mobile,² radiolocation³ services,

¹ The fixed service is a radiocommunication service between fixed points. A radiocommunication service is a service involving the transmission, emission and/or reception of radio waves for specific telecommunication purposes. (In the International Telecommunication Union ("ITU") *Radio Regulations*, unless otherwise stated, any radiocommunication service relates to terrestrial radiocommunication, which is any radiocommunication other than space radiocommunication or radio astronomy.) An emission is radiation produced, or the production of radiation, by a radio transmitting station. (For example, the energy radiated by the local oscillator of a radio receiver would not be an emission but a radiation.) Telecommunications is any transmission emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems. See ITU *Radio Regulations*, Edition of 1990, Revised in 1994, at pages RR1-2, RR1-4 and RR1-20.

² The mobile service is a radiocommunication service between mobile and land stations, or between mobile stations. A mobile station is a station in the mobile service intended to be used while in motion or during halts at unspecified points. A land station is a station in the mobile service not intended to be used while in motion. *Id.* at pages RR1-5 and RR1-11.

³ The radiolocation service is a radiodetermination service for the purpose of radiolocation. Radiolocation is radiodetermination used for purposes other than those of radionavigation. Radiodetermination is the determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radio waves. *Id.* at pages RR1-2 and RR1-8.

or satellite Digital Audio Radio Services ("satellite DARS"),⁴ consistent with the international *Radio Regulations*.⁵ Finally, we propose to establish service and technical rules to ensure that harmful interference is not caused to other radio services. We believe that these proposals will enable WCS licensees to use their spectrum in the most technically and economically efficient manner practicable. This action is being taken pursuant to the Omnibus Consolidated Appropriations Act, 1997 ("Appropriations Act").⁶

II. BACKGROUND

A. Appropriations Act

2. The Appropriations Act requires the Commission to reallocate the frequencies at 2305-2320 and 2345-2360 MHz to wireless services that are consistent with international agreements concerning spectrum allocations, and to assign the use of such frequencies by competitive bidding pursuant to Section 309(j) of the Communications Act of 1934 ("Communications Act").⁷ In addition, the Appropriations Act requires that the Commission, in making these bands of frequencies available for competitive bidding, seek to promote the most efficient use of the spectrum, and take into account the needs of public safety radio services. The Appropriations Act also requires that the Commission commence the competitive bidding process for the assignment of the frequencies made available by this action no later than April 15, 1997. Finally, the Appropriations Act requires the Commission to conduct the competitive bidding for these frequencies in a manner that ensures that all proceeds of the bidding are deposited in accordance with Section 309(j)(8) of the Communications Act, not later than September 30, 1997.

3. In order to make this spectrum available for licensing quickly, the Appropriations Act grants the Commission permission to use expedited administrative procedures. Specifically, the Appropriations Act states that rules governing the frequencies made available by this proceeding will be effective immediately upon publication in the Federal Register.⁸ The Appropriations Act

⁴ See *Amendment of the Commission's Rules with Regard to the Establishment and Regulation of New Digital Audio Radio Services*, GEN Docket No. 90-357, *Report and Order*, 10 FCC Rcd 2310 (1995). The broadcasting-satellite service is a radiocommunication service in which signals transmitted or retransmitted by space stations are intended for direct reception by the general public. *Id.* at page RR1-7.

⁵ See note 1, *supra*.

⁶ See Omnibus Consolidated Appropriations Act, 1997, P.L. 104-208, 110 Stat. 3009 (1996).

⁷ See 47 U.S.C. 309(j).

⁸ The Appropriations Act makes inapplicable to this rule making proceeding the contrary requirements of 5 U.S.C. § 553(d) (Administrative Procedure Act provision that a substantive rule must generally be published in the Federal Register at least 30 days before its effective date) and 5 U.S.C. §§ 801(a)(3) and 806(a) (Contract With America Advancement Act provisions).

further provides that 5 U.S.C. Chapter 6 (regulatory flexibility analysis requirements) and 44 U.S.C. §§ 3507 and 3512 (information collection requirements) will not apply to the rules and competitive bidding procedures governing the frequencies at issue here. Further, the statute provides that the Commission may grant a license application for these frequencies no earlier than seven days following issuance of a public notice of the acceptance for filing of the application or major amendment thereto, notwithstanding the 30-day public notice provisions of 47 U.S.C. § 309(b). Finally, the statute provides that the Commission may specify a period that is not less than five days following issuance of such public notice for the filing of petitions to deny a license application for these frequencies, notwithstanding the 30-day public notice provisions of 47 U.S.C. § 309(d)(1).

B. Existing Spectrum Allocations and Use

1. International

4. With regard to the frequencies under consideration in this proceeding, the member nations of the International Telecommunication Union ("ITU") have adopted the following radio service allocations that apply to use of this spectrum in the United States.⁹ The 2300-2450 MHz band is allocated to the fixed, mobile, and radiolocation services on a primary basis.¹⁰ In addition, the 2310-2360 MHz band is allocated to the broadcasting-satellite service (sound) and complementary terrestrial sound broadcasting service on a primary basis in the United States, and this use is limited to digital audio broadcasting.¹¹ Finally, the 2300-2450 MHz band is allocated to the amateur radio service on a secondary basis.¹²

2. Domestic

⁹ See ITU *Final Acts of the World Radiocommunication Conference (WRC-95)*, Geneva, 1995.

¹⁰ The aeronautical mobile service for telemetry, however, has priority over other uses by the mobile service in the 2300-2390 MHz band in the United States and the 2300-2483.5 MHz band in Canada. See international footnote S5.394. We also note that the ITU is transitioning to new Simplified Radio Regulations, which use the "S" numbering scheme for international footnotes. In anticipation of the ITU's ultimate conversion to the Simplified Radio Regulations, we are employing the new "S" numbering scheme for international footnotes adopted in this proceeding. The Commission lists the international footnotes immediately following the Table of Frequency Allocations in Section 2.106 of the Rules. See 47 C.F.R. § 2.106. Until such time as this list is revised in its entirety to comport with the new "S" numbering scheme, those international footnotes that are amended to the new scheme in individual proceedings will be listed in Section 2.106 immediately prior to the list of unamended footnotes employing the old numbering scheme.

¹¹ See 47 C.F.R. § 2.106, international footnote S5.393 (formerly 750B) and 47 C.F.R. § 2.106, United States footnote US327. This broadcasting-satellite allocation is also subject to the provisions of ITU Resolution 528. In addition, space stations of the broadcasting-satellite service in the 2310-2360 MHz band operating in accordance with No. S5.393 that may affect the services to which this band is allocated in other countries must be coordinated and notified in accordance with Resolution 33. Complementary terrestrial broadcasting stations are subject to bilateral coordination with neighboring countries prior to commencing their operations. See 47 C.F.R. § 2.106, international footnote S5.396 (formerly 751B).

¹² The amateur service is a radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest. See note 1, *supra*, at page RR1-10.

5. In the United States, the 2300-2310 MHz band was made available for exclusive non-Government use as of August 10, 1995.¹³ Currently, the only non-Government use of this band is by the amateur radio service, which operates in this spectrum on a secondary basis.¹⁴ The 2310-2360 MHz band was recently re-allocated to the non-Government broadcasting-satellite service on primary basis.¹⁵ This allocation is limited to digital audio broadcasting, commonly known as satellite DARS, in the United States.¹⁶ In the action allocating this spectrum to satellite DARS, we stated that it would be necessary to accommodate the aeronautical telemetry services now operating in the 2310-2360 MHz band in the 2360-2390 MHz band.¹⁷ The aeronautical telemetry community supported this re-accommodation. Continued use of the 2310-2360 MHz band by aeronautical telemetry and radiolocation users will be on a secondary basis.¹⁸

III. DISCUSSION

A. Reallocation of Spectrum for WCS

6. The Appropriations Act directs the Commission to reallocate the 2305-2320 and 2345-2360 MHz bands to wireless services that are consistent with international agreements concerning spectrum allocations.¹⁹ We interpret this provision to mean that the Commission may allocate this spectrum to any or all radio services also contained in the International Table of Frequency Allocations applicable to the United States. We believe that the allocation for WCS should provide for the broadest range of services permitted under international agreements. Accordingly, we propose to allocate the 2305-2320 and 2345-2360 MHz bands to the fixed, mobile, and

¹³ During the reallocation process, the National Telecommunications and Information Administration ("NTIA") recommended the following constraints: (1) the 2300-2310 MHz band must not be used for airborne orspace-to-Earth links; (2) commercial operations at 2300-2310 MHz must be limited to less than one watt of power; (3) unwanted emission levels of commercial applications on any frequency below 2300 MHz must be attenuated below the mean power of the unmodulated carrier by 70 dB; (4) and operation of commercial devices in the 2300-2310 MHz band must not be permitted on Ft. Irwin, California. *See Spectrum Reallocation Final Report*, U.S. Department of Commerce, February 1995, at pages 4-15 and 4-16.

¹⁴ *See* 47 C.F.R. § 97.301. The 2300-2310 MHz band is available for use by amateur stations having a control operator who has been granted any class of amateur operator license, except Novice.

¹⁵ *See* note 4, *supra*.

¹⁶ We are considering service, licensing and technical rules for satellite DARS in IB Docket No. 95-91. *See Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band*, IB Docket No. 95-91, *Notice of Proposed Rule Making*, 11 FCC Rcd 1 (1996) ("*Satellite DARS NPRM*").

¹⁷ *See* note 4, *supra*.

¹⁸ The 2320-2345 MHz band will continue to be available for the Government and non-Government mobile service and Government radiolocation service on a primary basis, until January 1, 1997, or until such time as a broadcasting-satellite (sound) service has been brought into use in such a manner as to affect or be affected by the mobile and radiolocation services, whichever is the later date. *See* Appendix for proposed revision of footnote US328.

¹⁹ *See* Appropriations Act, Section 3001(a)(1).

radiolocation services on a primary basis. We also propose to retain the current primary broadcasting-satellite allocation in the 2310-2320 and 2345-2360 MHz bands. We request comment on these proposals.

7. We note, however, that the large number of Canadian fixed service facilities in the 2310-2320 MHz band has previously caused us to request comment on licensing satellite DARS in the 2320-2360 MHz band first.²⁰ Accordingly, we request comment on the feasibility of satellite DARS in the 2310-2320 MHz band and on whether we should limit satellite DARS to the 2345-2360 MHz portion of the WCS spectrum. Alternatively, we could limit operations at 2310-2320 MHz to complementary terrestrial DARS operations subject to coordination with Canada. We request comment on these options.

8. As mentioned above, the 2300-2310 MHz band is currently allocated to the amateur radio service on a secondary basis. In addition, the 2310-2360 MHz band is permitted to be used by aeronautical telemetry operations on a secondary basis. We do not propose any changes to these allocations at this time. We reiterate, however, that these operations would be secondary to any WCS use of the 2305-2320 and 2345-2360 MHz bands. We seek comment on this approach.

B. Licensing Plan for WCS

1. Permitted Services

9. As indicated above, our spectrum allocation proposals for the 2305-2320 and 2345-2360 MHz bands would permit the provision of a broad range of fixed, mobile, radiolocation and broadcasting-satellite services. In keeping with this broad allocation, we propose to permit a WCS licensee to use this spectrum for any use permitted within any of the allocation categories of fixed, mobile, radiolocation, and broadcasting-satellite services, subject to international requirements and coordination. In establishing the General Wireless Communications Service ("GWCS") in August, 1995, we concluded that authorizing a wide variety of services bounded only by international allocations comported with our statutory authority and served the public interest by fostering the provision and mix of services most desired by the public.²¹ Similarly,

²⁰ See 11 FCC Rcd at 21. Satellite CD Radio, Inc., an applicant for a satellite DARS license, conducted an independent study which analyzed the coordination of U.S. satellite DARS systems with Canadian terrestrial systems and submitted it to the Commission. See Letter to Chief, Satellite Radio Branch regarding the Coordination of 2310-2360 MHz with Canada ("Coordination Study"), dated February 14, 1994, IB Docket No. 95-91. According to the Coordination Study, in 1994, 186 of 213 Canadian terrestrial stations operated between 2310-2320 MHz. See Coordination Study at 14. See also letter from Satellite Engineering Branch dated February 16, 1996 to representatives of Satellite CD Radio and other DARS applicants. Recent discussions between our staff and Industry Canada indicate that there are now approximately 230 Canadian terrestrial stations operating in the 2310-2360 MHz band. In addition, Canada has mobile aeronautical telemetry ("MAT") operations in the 2329.25-2390 MHz band.

²¹ See *Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, Second Report and Order*, 11 FCC Rcd 624 (1995). See also Becht, "The General Wireless Communications Service: FCC Spectrum Traffic Cop or Broker?," 4 *CommLaw Conspectus* 95 (1996).

we believe that permitting this flexibility in service offerings for WCS will foster the provision and mix of WCS services most desired by the public. We request comment on this approach. In particular, we request comment on industry experience and plans with regard to the GWCS, including how our rules permitting any and all allocable services in that band have served or are expected to serve the public interest in rapidly making available to the public those services most desired.

2. Licensed Service Areas

10. We also generally believe that licensing the WCS spectrum on the basis of large geographic service areas would facilitate operation of the broadest possible range of new communications services in the WCS spectrum and would promote their introduction in the most rapid and efficient manner. We request comment on the appropriate size for WCS licenses. Specifically, we request comment on whether WCS should be licensed on the basis of the 51 Major Trading Areas ("MTAs") defined for the narrowband and broadband Personal Communications Service ("PCS"),²² regional service areas similar to the 5 regions adopted for narrowband PCS,²³ or on a nationwide basis. For example, in the case of broadband PCS, we noted that the 51 MTA service areas, would provide certain economies of scale and scope needed

²² Rand McNally & Company ("Rand McNally") has divided the 50 States and the District of Columbia into 47 MTAs. See Rand McNally 1992 Commercial Atlas & Marketing Guide at pages 38-39 (123rd edition). Following the approach we have taken with regard to other services in which we have used MTA license areas, we would separate Alaska from the Seattle MTA so that Alaska would be licensed as a separate MTA-like area. We also would license separately the following insular areas as MTA-like areas: (1) Puerto Rico and the United States Virgin Islands; (2) Guam and the Northern Mariana Islands; and (3) American Samoa. Thus, if this alternative is adopted, we would license 51 MTAs and MTA-like areas, which is the approach we adopted in PCS. See 47 C.F.R. §§ 24.102(c) and 24.202(a). We note that Rand McNally owns the copyright to MTA Listings. The Personal Communications Industry Association and Rand McNally entered into an agreement regarding the use of Rand McNally's market area designations (e.g., MTAs) for licensing of various mobile radio services. WCS services in the 2305-2320 and 2345-2360 MHz bands are not covered by this agreement. Accordingly, a license agreement with Rand McNally would be necessary. The listings of the MTAs, including the counties, parishes, and census divisions that comprise each MTA, are available for public inspection in the Office of Engineering and Technology's Technical Information Center, 2nd Floor, 2000 M Street, N.W., Washington, D.C.

²³ The five regional narrowband PCS service areas were developed by aggregating MTAs into five geographic areas, each with approximately twenty percent of the nation's population. The five regions defined for narrowband PCS licenses are set forth in 47 C.F.R. §§ 24.102(b). See *Memorandum Opinion and Order* in GEN Docket No. 90-314 and ET Docket No. 92-100, 9 FCC Rcd 6 (1994), at ¶¶ 7-16. Thus, if we were to use the narrowband PCS regional service areas, as indicated above for MTAs, a license agreement with Rand McNally would be necessary. Alternatively, if a regional service area approach is deemed appropriate, we could also, for example, aggregate the 172 Economic Areas developed by the Department of Commerce into five geographic areas, each with approximately twenty percent of the nation's population. For example, such an approach was proposed for 220 MHz services in PR Docket No. 89-552. See *Amendment of Part 90 - Use of 220-222 MHz Band, Third Notice of Proposed Rulemaking*, 11 FCC Rcd 188, 219 & 296 App. D (1995). The Bureau of Economic Analysis within the Department of Commerce has divided the 50 States and the District of Columbia into 172 Economic Areas ("EAs"). Each EA consists of one or more economic nodes -- metropolitan areas or similar areas that serve as centers of economic activity -- and the surrounding counties that are economically related to the nodes. (Metropolitan areas include metropolitan statistical areas, primary metropolitan statistical areas, and New England county metropolitan areas.) Commuting patterns are the main factor used in determining the economic relationship among counties. The EA definition procedure requires that, as far as possible, each area include both the place of work and the place of residence of its labor force. See *Final Redefinition of the BEA Economic Areas*, 60 Fed. Reg. 13114 (March 10, 1995) (reducing number of EAs from 183 to 172). We adopted these 172 EAs as GWCS service areas and have listed them in 47 C.F.R. § 26.102(a). In addition, we defined three additional, EA-like, GWCS service areas: (1) Puerto Rico and the United States Virgin Islands; (2) Guam and the Northern Mariana Islands; and (3) American Samoa. 47 C.F.R. § 26.102(b).

for the development of low cost equipment, would promote the development roaming within large geographic areas and would facilitate interoperability.²⁴ In the case of narrowband PCS, we found it desirable to provide a service category that is smaller than nationwide but larger than the 51 Major Trading Areas on which many of the narrowband PCS licenses are based.²⁵ We observed that regional licenses would better reflect the technologies and business plans of parties intending to implement narrowband PCS systems serving wide areas that cover multiple cities. On the other hand, a nationwide service area would facilitate nationwide roaming and interoperability of services, and avoid the need for negotiation of roaming agreements among multiple carriers. A nationwide approach would also allow for maximum economies of scale, thus minimizing both the cost of providing service and the cost of equipment.

3. Spectrum for Each License

11. We also request comment on the appropriate amount of spectrum to be provided for each WCS license. We specifically request comment on a range of spectrum options for WCS, that is whether 5, 10, 15 or 30 MHz is the most suitable amount. We are particularly interested in commenters' views regarding the minimum bandwidth needed to permit WCS operators to compete effectively. For example, 5 MHz bandwidths would allow for paging, radiolocation, dispatch, or point-to-point backbone operations. Larger bandwidths, such as 10 to 15 MHz, would allow more direct competition with existing fixed and mobile service providers. Such an amount may also better support some multi-channel satellite DARS. Alternatively, a single 30 MHz license may offer the most effective approach for providing new two-way fixed or point-to-multipoint uses such as interconnection with the Internet and other digital network services. Finally, we request comment on what size spectrum block could best support, in part or fully, the provision of fixed local loop services.²⁶

12. We also seek comment on plans for licensing the WCS consistent with whatever minimum bandwidth should be adopted. We specifically request comment, for example, on whether the WCS spectrum should be assigned on a paired or unpaired basis. Alternatively, we request comment on an approach where spectrum bandwidths or pairing of the spectrum are determined through the competitive bidding process. For example, the 30 MHz of spectrum could be divided into 5 MHz "channels" and the amount of spectrum and the location of the spectrum (*i.e.*, contiguous or paired) for each WCS licensee would be determined through the auction process. We seek comment on all of these alternatives and we further invite commenting parties

²⁴ See *Amendment of the Commission's Rules to Establish New Personal Communications Services*, GEN Docket No. 90-314, *Second Report and Order*, 8 FCC Rcd 7700 at ¶ 75 (1993).

²⁵ See *Memorandum Opinion and Order*, GEN Docket No. 90-314 and ET Docket No. 92-100, at ¶¶ 8 and 14.

²⁶ See, for example, Petition for Rule Making filed by DSC Communications Corporation, dated June 4, 1996, RM-8837.

to suggest additional alternatives for both the amount of spectrum and the size of service areas for WCS licensees.

13. Finally, we note that the Appropriations Act requires that the Commission conclude initial licensing of this spectrum and the collection of all bidding proceeds on an expedited basis. We believe that licensing the WCS spectrum for service to large areas, with relatively few licenses to be awarded, would speed the WCS licensing process and the collection of bidding proceeds, consistent with the requirements of the Appropriations Act. In addressing the relative merits of licensing the WCS spectrum on the basis of each of the spectrum and service area possibilities discussed above, we ask interested parties to keep in mind the total number of licenses to be auctioned and to comment on whether that number of licenses can reasonably be auctioned within the time periods established by the Appropriations Act.²⁷ Whatever initial licensing approach is chosen for WCS, we propose to permit spectrum and service area aggregation through the auction process, *e.g.*, we would permit parties to bid for more than one license. In addition, as discussed below, we propose to allow post-auction partitioning and disaggregation. We request comment on how the choice of the number of licensees and amount of spectrum provided could affect competition. Commenting parties should also address the extent to which the new communications services offered by WCS would compete with other new and existing communications services.

C. Use of Competitive Bidding

14. The Appropriations Act directs the Commission to assign licenses to use the 2305-2320 and 2345-2360 MHz bands by competitive bidding pursuant to Section 309(j) of the Communications Act.²⁸ Section 309(j) generally provides that auctions may be used to award licenses among mutually exclusive applicants where the principal use of such spectrum will involve, or is reasonably likely to involve, a subscription-based service. We believe that it is reasonable to conclude that, given the broad service allocations we are proposing and the manner in which we are proposing to license this spectrum, the principal use of the WCS will involve, or is reasonably likely to involve, the transmission or reception of communications signals to subscribers for compensation. We anticipate that the most likely uses of WCS will be to provide a mix of fixed and mobile services similar to other services currently operating on a subscription basis. Fixed (and radiolocation) services are expected to include services that are generally similar to the Multichannel Multipoint Distribution Service ("MMDS"), the Location and Monitoring Service ("LMS"), Digital Termination Systems ("DTS"), Digital Electronic Messaging Service ("DEMS") and certain of the services provided by Local Multipoint

²⁷ We note, however, that a licensing plan of six 5 MHz licenses for each of the 51 MTA-like service areas would require the auctioning of 306 licenses. Given our previous auction experience, such an auction may be difficult to complete within the timeframe required under the Appropriations Act and may require different auction methodology, such as oral outcry, to complete on a timely basis. We therefore generally will not entertain proposals that would require the auctioning of more than 306 WCS licenses.

²⁸ See 47 U.S.C. § 309.

Distribution Service ("LMDS"). Mobile services are expected to include services generally similar to PCS, cellular, Specialized Mobile Radio ("SMR") and paging. All of these services are currently provided to subscribers for compensation and we expect that the new WCS offerings would be provided on a similar basis. In this regard, even if a WCS licensee chooses to offer a satellite DARS service on that portion of the spectrum available for such use, we believe it likely that this service would also be offered on a subscription basis.²⁹ We request comment on this assessment.

15. As required by the Appropriations Act, we are proposing to assign licenses to use the WCS frequencies by competitive bidding in accordance with the principles set forth in Section 309(j) of the Communications Act. Section 309(j)(3)(A) states that the Commission shall seek to promote the development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas, without administrative or judicial delays. In this regard, we believe that providing for large service areas, in conjunction with our broad, flexible allocation approach described above, will foster the development of the greatest range of new services and technologies. This approach will also permit these services and technologies to be deployed in a rapid and efficient manner to all areas of the nation, including rural areas.

16. Section 309(j)(3)(B) states that the Commission shall seek to promote economic opportunity and competition and ensure that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women. Consistent with this objective, we are proposing to allow WCS licensees to disaggregate portions of their assigned spectrum and partition geographic service areas through a transfer of FCC license authority. In addition, licensees would be permitted to "franchise" portions of their spectrum and geographic service areas on a leased basis, where the WCS licensee would retain ultimate responsibility for meeting interference and other licensing requirements. We recently addressed the issues of geographic partitioning and spectrum disaggregation by Commercial Mobile Radio Service ("CMRS") licensees, and noted that providing licensees with the flexibility to partition their geographic service areas will create smaller areas that can be licensed to small businesses, including those entities which may not have the resources to participate successfully

²⁹ We note that, during the Commission's ongoing proceeding to establish service rules for satellite DARS, three of the four applicants on file propose services offered pursuant to private contractual relationship with the subscribing audience using a scrambled signal. See note 16, *supra*, at ¶¶ 22-26. In contrast, a broadcasting service involves the transmission of programming intended for direct reception by the general public. See 47 C.F.R. § 2.1. Thus, we stated that, since three applicants have proposed to provide non-broadcast service within the meaning of Section 2.1 of the Commission's Rules and *Subscription Video*, a requirement that all DARS licensees operate as broadcasters appears to be unwarranted and inappropriate. See *Subscription Video*, 2 FCC Rcd 1001, 1006 (1987) (licensees that limit receipt of program services to paying subscribers are providing non-broadcast services), *aff'd sub nom. National Association for Better Broadcasting v FCC*, 849 F. 2d 665 (D.C. Cir. 1988).

in spectrum auctions.³⁰ In addition, partitioning may provide a funding source that will enable licensees to construct their systems and provide the latest in technological enhancements to the public. We believe that this ability to disaggregate and franchise the use of this spectrum may also help to promote the prompt introduction of new services to rural areas and facilitate participation in these services by a wide variety of parties including small businesses, rural telephone companies, and businesses owned by members of minority groups and women.

17. Finally, we note that Section 309(j)(6)(F) of the Communications Act specifically states that the use of competitive bidding shall not be construed to prohibit the Commission from issuing nationwide, regional, or local licenses.³¹ We also note that using large geographic service areas would simplify the licensing process, and help to ensure that the auction is completed in a timely manner, as required by the Appropriations Act. Accordingly, we believe that the WCS competitive bidding options described above fully comport with the requirements and intent of Section 3001 of the Appropriations Act and Section 309(j) of the Communications Act. We seek comment on this assessment.

D. Promote Efficient Spectrum Use

18. The Appropriations Act states that in making these frequencies available for competitive bidding, the Commission shall seek to promote the most efficient use of the spectrum.³² In general, we believe that assigning frequencies through competitive bidding ensures that spectrum is made available to those who value it most highly and therefore are most likely to put it to its most economically efficient use. In addition, as indicated above, we are proposing that the WCS spectrum may be used to provide any type of fixed, mobile, radiolocation or satellite DARS services. We believe there are significant competitive alternatives for each of these types of services that will ensure that WCS licensees have incentives to operate in an efficient and effective manner. We therefore believe that there will be sufficient market incentives to promote the most efficient use of the 2305-2320 and 2345-2360 MHz bands, as required by the Appropriations Act.

E. Public Safety Needs

³⁰ See *Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Services Licensees; Implementation of Section 257 of the Communications Act -- Elimination of Market Entry Barriers (Elimination of Market Barriers)*, WT Docket No. 96-148, *Notice of Proposed Rule Making*, 11 FCC Rcd 10187 (1996).

³¹ See 47 U.S.C. § 309(j)(6)(F).

³² See Appropriations Act, Section 3001(b)(1). As indicated above, promoting efficient spectrum use is also an objective of Section 309(j) of the Communications Act.

19. The Appropriations Act instructs the Commission to take into account the needs of public safety radio services in making the WCS spectrum available through competitive bidding. In addition, a letter from the Chairman and Ranking Member of the House Committee on Commerce reiterates Congressional intent that we consider the needs of public safety in auctioning this spectrum. In particular, this letter suggests that the Commission, consistent with its obligation to promote the public interest, "pay particular attention to how the needs of public safety as well as commercial applicants may best be met in determining how to design this auction." As Congress directed, we will consider the needs of public safety radio services in this proceeding by seeking comment on a broad array of options. We note that the Appropriations Act marks the first time that Congress has specifically directed the Commission to consider the needs of public safety radio services in connection with licensing a particular spectrum band. We invite interested parties, including public safety entities, to comment on how we could best effectuate the Congressional intent with regard to public safety needs related to this spectrum.

20. The Public Safety Wireless Advisory Committee recently issued a report ("*PSWAC Final Report*") that analyzes the current and future communications resource and underlying spectrum needs of entities whose primary mission is public safety. The *PSWAC Final Report* makes several recommendations for satisfying the immediate and future needs of the public safety community through the year 2010 including (1) the provision of additional spectrum, (2) improved interoperability, (3) more flexible licensing policies, (4) increased sharing of spectral and other resources, (5) greater use of commercial services and (6) alternative methods for funding public safety communications. In fulfilling Congress's mandate to take into account the needs of public safety in auctioning this spectrum, we seek comment on which of these objectives can best be achieved through an auction of this spectrum. We ask commenters to make specific recommendations regarding how we can design auction and licensing rules that will benefit the public safety community consistent with the recommendations contained in the *PSWAC Final Report*.

21. One of the needs identified by public safety is additional spectrum. We note that the *PSWAC Final Report* did not recommend this band for public safety use, but we also recognize that Congress had not directed the Commission to reallocate and auction this spectrum when the *PSWAC Final Report* was submitted. We therefore seek comment on whether we should consider an allocation of some portion of this spectrum to meet the needs of public safety providers. In light of the specific language of this statute, we seek comment on whether we have statutory authority to make such an allocation. Alternatively, should the Commission assign this spectrum with a public interest obligation to contribute towards the other needs identified by the public safety community? We seek comment on whether the Commission would have the authority to adopt such an approach.

22. In addition, it may be that in the WCS spectrum some of the communications needs of public safety entities could be met by commercial systems serving the general public and possibly with some customized features for the exclusive use of public safety users. Public safety organizations may find it desirable to subscribe to a service offered by the commercial provider

or lease capacity or spectrum from a commercial provider. We note that a key recommendation of the *PSWAC Final Report* suggested that "a range of non-mission critical communications can be satisfied by commercial systems" and concluded that:

Commercial wireless systems, such as cellular, Personal Communications Services (PCS), mobile satellite, paging, data, and network applications, are evolving rapidly and may offer tangible and reasonable alternatives to the demand for additional spectrum to meet present and future Public Safety requirements.

We seek comment on whether and how commercial services operating in this spectrum could address some of the communications needs of the public safety community. Specifically, what types of commercial services in this band would public safety entities find useful? Should the Commission take steps to encourage the use of the spectrum for such services? If so, what steps should it take? For example, should public safety needs be considered in determining the geographic scope and size of WCS licenses? If so, what size spectrum blocks or particular geographic license areas would be most conducive to the types of services the public safety community would find useful? Should the Commission offer bidding credits to commercial providers who propose to provide these types of services?

F. Service and Technical Rules

1. Eligibility

23. We propose that there be no restrictions on eligibility for a WCS license, other than those foreign ownership restrictions set forth in Sections 310(a), 310(b)(1) and 310(b)(2) of the Communications Act.³³ We believe that opening the WCS market to a wide range of applicants will permit and encourage entrepreneurial efforts to develop new technologies and services, while helping to ensure the highest and best use of this spectrum. We also believe that, given the relatively large amount of spectrum that is available to provide services similar to those that could be operated on the WCS spectrum, opening up eligibility to all applicants, in this instance, will not lead to concerns about excessive concentration of market power.³⁴ On the other hand, disallowing existing licensees or other entities from competing for a WCS license could deny the public the benefits of economies of scope and scale from the use of this spectrum.

2. CMRS Spectrum Cap

³³ See 47 U.S.C. § 310.

³⁴ In this regard, we also see no reason to preclude the pending satellite DARS applicants from participating in the competitive bidding process for the 2310-2320 and 2345-2360 MHz bands.

24. The CMRS spectrum cap³⁵ was adopted in 1994 to "discourage anti-competitive behavior while at the same time maintaining incentives for innovation and efficiency."³⁶ We were concerned that "excessive aggregation [of spectrum] by any one of several CMRS licensees could reduce competition by precluding entry by other service providers and might thus confer excessive market power on incumbents."³⁷ The spectrum cap is intended to promote a vigorous competitive market for the provision of commercial mobile radio services, and to ensure that each mobile service provider (*i.e.*, cellular, PCS or SMR licensee) has the opportunity to obtain sufficient spectrum to compete effectively and that no single provider is able to preclude the provision of service by effective competitors or significantly reduce the number of competitors by aggregating spectrum.³⁸

25. We seek comment on whether WCS spectrum used to provide CMRS should count against the 45 megahertz spectrum cap that applies to certain CMRS licensees. We note that applying the spectrum cap could well exclude firms with the most experience and innovative technologies from participating in the auction and having the opportunity to use this spectrum to serve the public. On the other hand, if a CMRS provider with the maximum amount of spectrum permitted under our current CMRS spectrum cap were to acquire WCS spectrum, that provider possibly could gain a dominant position in the CMRS marketplace. We are interested in commenters' views on whether the WCS spectrum is likely to be used to provide CMRS services, and, if so, whether the current CMRS market is sufficiently competitive that the considerations that gave rise to adoption of the CMRS spectrum cap are not applicable to the WCS spectrum. Commenters should also address the potential costs of applying the cap to the WCS spectrum in terms of lost economies of scale and scope that might exist if CMRS licensees were allowed to acquire this spectrum.

26. To the extent that commenters believe that the WCS spectrum will be used for CMRS services, we also seek comment on any alternative mechanisms that would be appropriate to protect against the concentration of control of licenses for CMRS spectrum, in order to ensure vigorous competition in wireless services and to implement the Communications Act.

3. Disaggregation and Partitioning

³⁵ The spectrum cap currently provides that "[n]o licensee in the broadband PCS, cellular, or SMR services (including all parties under common control) regulated as CMRS shall have an attributable interest in a total of more than 45 megahertz of licensed broadband PCS, cellular and SMR spectrum regulated as CMRS with significant overlap in any geographic area." See 47 C.F.R. §20.6(a); see also *Amendment of Parts 20 and 24 of the Commission's Rules -- Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, *Report and Order*, 11 FCC Rcd 7824, ¶¶ 94-107 (1996) (maintaining the 45 megahertz CMRS spectrum cap and eliminating the 35 megahertz cellular/PCS spectrum cap and the 40 megahertz PCS spectrum cap).

³⁶ Implementation of Sections 3(n) and 332 of the Communications Act, *Third Report and Order*, GN Docket 93-252, 9 FCC Rcd 7988, 8105 (1994) ("*CMRS Third Report and Order*").

³⁷ *Id.* at 8101.

³⁸ See *CMRS Third Report and Order* at ¶¶ 258-260.

27. As indicated above, we propose to permit the WCS licensee or licensees to partition their service areas and to disaggregate their spectrum. We believe that such an approach would serve to promote the efficient use of the spectrum. It would also provide a means to overcome entry barriers through the creation of smaller licenses that require less capital, thereby facilitating greater participation by smaller entities such as small businesses, rural telephone companies and businesses owned by minorities and women.³⁹

28. We therefore propose to permit WCS licensees to partition their service areas into smaller geographic service areas. We also propose to permit WCS licensees to disaggregate their spectrum into smaller blocks. Thus, a WCS licensee would be allowed to transfer the license for all or a portion of its spectrum in a given geographic area to another party. For the purposes of partitioning and disaggregation, we also propose to require that WCS systems be designed to not exceed a signal level of 47 dBuV/m at the licensee's service area boundary, unless the affected adjacent service area licensees have agreed to a different signal level. We request comment on what limits, if any, should be placed on a WCS licensee's ability to partition its service area and disaggregate its spectrum.

29. We note that in WT Docket No. 96-148, we recently proposed to permit both geographic partitioning and spectrum disaggregation by CMRS licensees.⁴⁰ In the case of broadband PCS service, we proposed to permit geographic partitioning along county lines and spectrum disaggregation to a minimum of one megahertz. In making this proposal, we tentatively concluded that requiring partitioning of licenses along county lines and spectrum disaggregation of not less than one megahertz would reduce the administrative burden on the Commission and minimize interference concerns among licensees. We also indicated that once an initial license is assigned, we believe that licensees should ordinarily be free to disaggregate their spectrum and to partition their service areas in order to operate within the parameters that they determine to be efficient. We request comment on whether such an approach should apply to the WCS spectrum. We also request comment on whether, if we were to establish initial nationwide WCS service areas, geographic partitioning should be limited to larger areas such as the 51 MTA service areas. Such an approach might facilitate the relicensing of such areas if the licensee were, for example, to go out of business. This approach may also reduce the administrative burden on the Commission or for international coordination of WCS operations. As indicated above, we are also proposing to allow WCS licensees to franchise portions of their spectrum and geographic service areas on a leased basis. In such cases, we see no need to limit such operations to any minimum amount of spectrum or any particular geographic area since the WCS licensee would retain ultimate control and responsibility for all operations and there is no additional administrative burden on the Commission. We request comment on these proposals.

³⁹ See *Elimination of Market Barriers*, at ¶¶ 11-15.

⁴⁰ See *Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Service Licensees*, WT Docket No. 96-148, *Notice of Proposed Rule Making*, FCC 96-287 (released July 15, 1996).

4. License Term

30. The Communications Act allows the Commission to establish a license term of up to 10 years, except for broadcasting stations, which may have a license term of up to 8 years.⁴¹ Previously, the Commission established a 10 year license term for CMRS, but has used a 5 year license term for private services. For services in the 2305-2320 and 2345-2360 MHz bands, we propose to establish a license term of 10 years, with a renewal expectancy similar to that of PCS and cellular telephone licensees. We believe that this relatively long license term, combined with a high renewal expectancy, should help provide a stable regulatory environment that will be attractive to investors and, thereby, encourage development of this new frequency band. With respect to the renewal of a WCS license, we propose to consider the amount and type of service being provided by the licensee in connection with its license renewal application. In this connection, we propose to require WCS licensees to submit a showing five years from license grant and ten years from license grant demonstrating the construction of facilities and the level of service being provided.

31. In the event that a WCS license is partitioned or disaggregated, we propose that any partitionee/disaggragatee be authorized to hold its license for the remainder of the partitioner's/disaggregator's original ten-year license term. We tentatively conclude that this approach is appropriate because a licensee, through partitioning, should not be able to confer greater rights than it was awarded under the terms of its license grant. Moreover, we tentatively conclude that this approach would be the simplest to administer. We also observe that this approach is similar to the partitioning provisions we recently adopted for the Multipoint Distribution Service⁴² and proposed in the *Broadband NPRM*.⁴³ We solicit comment on this tentative conclusion.

5. Regulatory Status

32. The Communications Act applies differing requirements based on the type of service and the regulatory status of licensees, *e.g.*, whether the service is common carrier or private. A WCS operator would be allowed to provide a variety or combination of fixed, mobile, satellite DARS, and radiolocation services. Therefore, we propose to rely on the applicant to identify the type of WCS service or services it will provide, with sufficient detail to enable the Commission to determine the applicant's regulatory status. This approach should allow us to carry out our responsibilities while imposing the least regulatory burden on the licensee. To clarify and

⁴¹ See 47 U.S.C. § 307. Previously, television and radio broadcasting stations were permitted to have a license term of up to 5 and 7 years, respectively.

⁴² See *Amendment of Parts of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service*, MM Docket No. 94-131, Report and Order, 10 FCC Rcd 9589, 9614 (1995).

⁴³ See *Broadband NPRM* at 15-16.

simplify the initial regulatory status, we will presume that a WCS licensee is providing a CMRS service, which we believe will be a likely use of this spectrum, as discussed above. We delegate to the Wireless Telecommunications Bureau authority to develop forms appropriate to collect this data, and to monitor changes in licensee status. Moreover, we propose that the broadcasting-satellite service allocation be governed by the satellite DARS regulations currently under development in IB Docket No. 95-91. We request comment on these proposals.

6. Out-of-Band Emission Limits

33. Since WCS will operate in the 2305-2320 and 2345-2360 MHz bands, we need to consider interference protection to the following adjacent operations: 1) satellite DARS at 2320-2345 MHz, 2) Government Deep Space Network receivers at 2290-2300 MHz,⁴⁴ and 3) Government and commercial telemetry above 2360 MHz.

34. In order to provide protection to these adjacent operations, we propose that all emissions outside of the WCS bands of operation be attenuated below the maximum spectral power density (p) within the band of operation, as follows:

- 1) *For fixed operations, including radiolocation*: By a factor not less than $43 + 10 \log (p)$ dB on all frequencies between 2300 and 2305 MHz and above 2360 MHz; and not less than $70 + 10 \log (p)$ dB on all frequencies below 2300 MHz and between 2320-2345 MHz band.
- 2) *For mobile operations, including radiolocation*: By a factor not less than $43 + 10 \log (p)$ dB on all frequencies between 2300 and 2305 MHz, between 2320 and 2345 MHz, and above 2360 MHz; and not less than $70 + 10 \log (p)$ dB on all frequencies below 2300 MHz.
- 3) *For WCS satellite DARS operations*: The limits set forth in Section 25.202(f) of the Commission's rules apply.⁴⁵

For fixed and mobile operations, including radiolocation, the above requirements are based on peak measurements using a resolution bandwidth of a least 1 MHz. In addition, to further protect operations in adjacent bands, we propose to require that the frequency stability of transmission within the 2305-2320 and 2345-2360 MHz bands be sufficient to ensure that the fundamental emissions remain within the authorized frequency bands. We request comment on these proposed out-of-band emissions limits.

⁴⁴ The National Aeronautics and Space Administration ("NASA") operates a complex on the Ft. Irwin Military Reservation for its Deep Space Network in order to provide continuous communications with planetary spacecraft. The Deep Space Network uses very large high gain antennas and state of the art receiver systems in order to receive very low-level signals in the 2290-2300 MHz band.

⁴⁵ See 47 C.F.R. § 25.202(f).

35. Finally, in order to protect Government Deep Space Network receivers at 2290-2300 MHz, we propose to prohibit use of the 2305-2310 MHz band for airborne or space-to-Earth links. Further, we propose that WCS operations within 50 kilometers (31 miles) of 35° 20' North Latitude and 116° 53' West Longitude (coordinates of the Deep Space Network receive site) be subject to coordination. Alternatively, we request comment on whether it would be more appropriate to require less out-of-band attenuation in the case of mobile transmitters, (*i.e.*, such transmitters would be subject to only the 43 + 10 log (p) dB requirement) but require that the coordination zone be extended to 120 kilometers (75 miles). Parties should address the trade-offs with regard to lower mobile equipment costs and the additional coordination constraints imposed by this alternative.

7. International Coordination

36. Until international agreements are completed, WCS operations will be required to protect existing non-U.S. operations in the 2305-2320 and 2345-2360 MHz bands, and WCS operations in the border areas would be subject to coordination with those countries, as appropriate. In addition, satellite DARS operations on WCS spectrum would be subject to international satellite coordination procedures. With regard to this matter, parties should be aware that international coordination could be a complex and lengthy process and could vary significantly depending upon the types of WCS services that are to be provided. International coordination requirements, therefore, should be taken carefully into account in developing business plans for the provision of WCS. This is particularly important for parties contemplating the provisions of WCS in border areas or the provision of satellite DARS operations.⁴⁶

8. RF Safety

37. With regard to RF safety requirements, we propose to treat specific WCS services and devices, operating within the 2305-2320 MHz and 2345-2360 MHz bands, in a comparable manner to other services and devices that have similar operating characteristics. Sections 1.1307(b), 2.1091, and 2.1093 of our rules list the services and devices for which an environmental evaluation must be performed.⁴⁷ Accordingly, we propose that an environmental evaluation for RF exposure would be required for the following WCS operations: 1) transmitting terrestrial stations in the satellite DARS service; 2) fixed operations, including base stations and radiolocation, that have an effective radiated power ("ERP") greater than 2000 watts; and, 3) mobile and portable devices⁴⁸ that have operating characteristics or functions similar to cellular, PCS or "covered" SMR services, *i.e.*, operations that are typified by long periods of use or are

⁴⁶ Potential satellite DARS applicants should consult the letter from Satellite Engineering Branch dated February 16, 1996 to representatives of Satellite CD Radio and other DARS applicants and responses thereto that address coordination in these bands for satellite DARS. These documents are filed in IB Docket No. 95-91, GEN Docket 90-357, RM No. 8610, PP-24, PP-86, and PP-87.

⁴⁷ See 47 C.F.R. §§ 1.1301, 1.1307(b), 2.1091, and 2.1093. The RF radiation exposure limits are set forth in 47 C.F.R. §§ 1.1310, 2.1091, and 2.1093, as applicable.

⁴⁸ See 47 C.F.R. §§ 2.1091(b) and 2.1093(b) for the definitions of "mobile" and "portable" devices.

interconnected to the public switched telephone network. We invite comment on this proposal and request suggestions for alternatives that would ensure public safety with respect to exposure to RF radiation.

G. Auction Procedures

38. In accordance with the Appropriations Act, and pursuant to the expedited schedule imposed thereby, we propose below an auction design and pre-auction procedures for the WCS service. Specifically, we propose that the method of competitive bidding be a simultaneous multiple round electronic auction (if more than one license is offered). We base this proposal on the need to quickly auction the WCS licenses and to promote the efficient use of the spectrum. The Appropriations Act requires the Commission to commence the WCS auction no later than April 15, 1997, and to conduct the auction in a manner that ensures that all proceeds are deposited into the United States Treasury no later than September 30, 1997.

1. Competitive Bidding Design

39. We anticipate conducting the auction for the WCS in conformity with the general competitive bidding rules in Part 1, Subpart Q of the Commission's Rules,⁴⁹ and substantially consistent with the auctions that have been employed in other wireless services. In the *Second Report and Order* in the competitive bidding docket,⁵⁰ we indicated that we would tailor the design of each auction to fit the characteristics of the licenses to be awarded,⁵¹ and we established criteria for selecting the auction design most appropriate for each particular service. In general, we indicated that the auction procedures chosen for each service should be those that will best promote the policy objectives identified by Congress.⁵² We further concluded in the *Second Report and Order* that in most cases the goals set forth in Section 309(j) will be best achieved by designing auctions that award authorizations to the parties that value them most highly. As we explained, such parties are most likely to deploy new technologies and services rapidly, and to promote the development of competition for the provision of those and other services.⁵³

40. We propose to adopt the simultaneous multiple round competitive bidding design used in the PCS auctions for the WCS auction. Multiple round bidding should provide more information to bidders than single round bidding during the auction about the values of the

⁴⁹ 47 C.F.R. Part 1, Subpart Q.

⁵⁰ *Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, PP Docket No. 93-253, FCC 94-61, *Second Report and Order*, 9 FCC Rcd 2348 (1994) ("*Second Report and Order*").

⁵¹ *Id.* at 2367.

⁵² Congress's objectives are, in this instance, set forth in two places: Section 309(j) of the Communications Act (47 U.S.C. § 309(j)) and Section 3001 of the Appropriations Act.

⁵³ *Second Report and Order*, 9 FCC Rcd at 2360.

licenses. With better information, bidders have less incentive to shade their bids downward in order to avoid the "winner's curse," that is, the tendency for the winner to be the bidder who most overestimates the value of the item being auctioned.⁵⁴ Finally, multiple round bidding is likely to be more fair than single round bidding. Every bidder has the opportunity to win if it is willing to pay the most for it. Thus, we tentatively conclude that multiple round bidding would be the best method of auctioning the WCS license or licenses, and we seek comment on this tentative conclusion.

41. We also tentatively conclude that, if more than one WCS license is to be awarded, all WCS licenses should be awarded in a single simultaneous multiple round auction. A single simultaneous auction will facilitate any aggregation strategies that bidders may have, and it would provide the most information to bidders about license values at a time that they can best put that information to use. We seek comment on this tentative conclusion.

42. If we adopt simultaneous multiple round bidding as our method of auctioning WCS licenses, we believe that bidding should be allowed only by electronic means. Though oral outcry auctions can be simple and rapid, it is not possible to auction multiple licenses simultaneously in an oral auction. Further, given the potentially large value of the WCS spectrum, we believe that an electronic multiple round auction is preferable because it would permit bidders time between rounds to confer with principals and reassess their valuation models and bidding strategies. This is especially important if more than one license is to be awarded. Thus, we tentatively conclude that electronic bidding would be the best method of submitting bids for this auction. In the event that we decide to use electronic multiple round bidding, we tentatively conclude that this auction should be conducted by remote bidding (by computer) without the option of telephonic bidding. We also propose, however, to reserve the discretion to conduct the WCS auction on-site should circumstances warrant. We seek comment on all of these proposals and tentative conclusions.

2. Bidding Procedures

43. We tentatively conclude that the WCS auction will follow the general competitive bidding procedures of Part 1, Subpart Q. We seek comment on this tentative conclusion.

44. Minimum Opening Bid and Minimum Bid Increments. We also tentatively conclude to reserve the discretion to establish a minimum opening bid for the WCS license or licenses. A minimum opening bid would cause bidders to start bidding at a substantial fraction of the final price of the license or licenses, thus ensuring that the auction proceeds quickly and increasing the likelihood that the public receives fair market value for the license or licenses. We seek comment on this tentative conclusion. In addition, we ask interested parties to suggest the appropriate level of a minimum opening bid for the WCS license or licenses. We also tentatively conclude that the

⁵⁴ See *Second Report and Order*, 9 FCC Rcd at 2362.

Wireless Bureau should be given discretion to establish, raise and lower minimum bid increments in the course of the auction.⁵⁵ We seek comment on this approach.

45. Tie Bids. Where a tie bid occurs, we tentatively conclude that the high bidder should be determined by the order in which the bids were received by the Commission. We request comment on this tentative conclusion.

3. Procedural and Payment Issues

46. Subpart Q of Part 1 of the Commission's rules also establishes procedural and payment rules for FCC auctions generally, and we tentatively conclude that, with certain modifications proposed below, these rules should apply to the WCS auction. We seek comment on this tentative conclusion.

47. Pre-Auction Application Procedures. Applicants would be required to file a short-form application, FCC Form 175, prior to the auction.⁵⁶ In addition, although we have previously allowed for both electronic and manual filing of such applications, we tentatively conclude that we should require electronic filing of all applications for this auction. We believe that electronic filing of applications would serve the best interests of auction participants as well as ensure that the WCS auction will be completed within the time frame mandated under the Appropriations Act. We have developed user-friendly electronic filing software and Internet World Wide Web forms to give applicants the ability to easily and inexpensively file and review applications. This software helps applicants ensure the accuracy of their applications as they are filling them out, and enables them to avoid discovering errors and omissions after the applications are already filed. Particularly in light of the legislative deadline of April 15, 1997, for commencement of this auction, we believe that requiring electronic filing would be helpful to applicants as well as the Commission. By shortening the time required for the Commission to process applications before the auction, electronic filing would increase the lead time available to applicants to pursue business plans and arrange necessary financing before the short-form deadline. We seek comment on these proposals and tentative conclusions.

48. As part of the information provided in the short-form application, we propose to require that an applicant's electronic submission of FCC Form 175 include a certification that the applicant is not in default on any Commission licenses and that it is not delinquent on any extension of credit from any federal agency. In the *Second Report and Order*, we decided that we should require sufficient information on the short-form application to make a determination that "the application is not in violation of Commission rules and that applications not meeting

⁵⁵ 47 C.F.R. § 1.2104(d).

⁵⁶ See 47 C.F.R. § 1.2105(a).

those requirements may be dismissed prior to the competitive bidding."⁵⁷ Part of this documentation includes certification that the bidder has the legal, technical, financial, and other qualifications to bid in the auction. A certification regarding defaulted licenses and delinquent payments to federal agencies would enable us to better evaluate the financial qualifications of potential bidders, because it would allow us to determine whether any bidder may later be subject to a monetary judgment or collection procedures that may impair its financial ability to provide service.

49. Upfront Payment. The Part 1 rules require the submission of an upfront payment as a prerequisite to participation in spectrum auctions.⁵⁸ We propose to set the amount of the WCS upfront payment based on the general formula we adopted in the Competitive Bidding *Second Report and Order* of \$.02 per megahertz per population. We seek comment on this proposal. We also seek comment on alternative methods of establishing an upfront payment, and in particular, on how the Commission may estimate the value of the spectrum to be auctioned.

50. We also propose to require that bidders deposit their upfront payments in our lock-box bank by wire transfer by a date to be announced by public notice. Although in the past we have permitted payment by cashier's check, we believe that requiring wire transfers would benefit bidders by streamlining and expediting the administration of the auction. Our experience has shown that verification of payments remitted to us by cashier's check is time-consuming and cumbersome and requires the allotment of extra processing time prior to the start of the auction. Permitting payment by cashier's check would require that upfront payments be made at an earlier point, which would decrease applicants' lead time to pursue business plans and arrange necessary financing before the start of the auction. In addition, we believe that, given the large number of financial institutions offering wire transfer services, a requirement that bidders remit their upfront payments by wire transfer would result in minimal, if any, extra cost to auction applicants. Such a cost is far outweighed by the benefit of speeding the auction process through quicker verification of payments. We seek comment on this tentative conclusion.

51. Down Payment and Full Payment. We tentatively conclude that to help ensure that auction winners are able to pay the full amount of their bids requires every winning bidder in an auction to tender a down payment sufficient to bring its total amount on deposit with the Commission up to 20 percent of its winning bid.⁵⁹ We therefore tentatively conclude that the winning bidder or bidders in the WCS auction should be required to submit a down payment equal to 20 percent of its winning bid within 10 business days after the issuance of a public notice announcing the winning bidder for the license. We seek comment on this tentative conclusion.

⁵⁷ *Second Report and Order*, 9 FCC Rcd at 2375.

⁵⁸ *See* 47 C.F.R. § 1.2106.

⁵⁹ *See* 47 C.F.R. § 1.2107(b).

52. If a winning bidder makes its down payment in a timely manner, we propose that it file an FCC Form 600 long-form application and follow the long-form application procedures in Section 1.2107.⁶⁰ After reviewing the winning bidder's long-form application, and after verifying receipt of the winning bidder's 20 percent down payment, the Commission would announce the application's acceptance for filing, thus triggering the filing window for petitions to deny. Under Section 3001(c) of the Appropriations Act, parties would have five days following public notice that an application was accepted for filing to file a petition to deny.⁶¹ Because Section 3001(c) provides for a period of seven (7) days following such public notice before any licenses may be awarded, we propose to allow three (3) days for parties to file a response to any petition to deny.⁶² If, pursuant to Section 309(d) of the Communications Act, the Commission dismissed or denied any and all petitions to deny, the Commission would announce by public notice that it is prepared to award the license, and the winning bidder would then have 10 business days to submit the balance of its winning bid. If the bidder does so, the license would be granted. If the bidder fails to submit the required down payment or the balance of the winning bid or the license is otherwise denied, we would assess a default payment as discussed below. We request comment on these proposals.

53. Amendments and Modifications of Applications. To encourage maximum bidder participation, we propose to allow applicants to amend or modify their short-form applications as provided in Section 1.2105.⁶³ In the broadband PCS context, we modified our rules to permit ownership changes that result when consortium investors drop out of bidding consortia, even if control of the consortium changes due to this restructuring.⁶⁴ We propose to adopt the same exception to our rule prohibiting major amendments in the WCS auction. We seek comment on all of this proposal.

54. Bid Withdrawal, Default and Disqualification. We tentatively conclude that the withdrawal, default, and disqualification rules for the WCS auction should be based upon the procedures established in our general competitive bidding rules. With regard to bids which are submitted in error, we propose to apply the guidelines which we recently fashioned to provide for relief from the bid withdrawal payment requirements under certain circumstances.⁶⁵

⁶⁰ See 47 C.F.R. § 1.2107.

⁶¹ See Appropriations Act, § 3001(c).

⁶² *Id.*

⁶³ 47 C.F.R. § 1.2105.

⁶⁴ See *Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, PP Docket No. 93-253, *Fourth Memorandum Opinion and Order*, 9 FCC Rcd 6858, 6868 (1994).

⁶⁵ See *Atlanta Trucking Associates, Inc. and MAP Wireless L.L.C. Requests to Waive Bid Withdrawal Payment Provisions*, *Order*, FCC 96-203 (May 3, 1996), *recon. pending*. See also *Georgia Independent PCS Corporation Request to Waive Bid Withdrawal Payment Provision*, *Order*, DA 96-706 (May 6, 1996), *app. rev. pending*.

4. Regulatory Safeguards

55. Anti-Collusion. In the *Second Report and Order*, we adopted anti-collusion rules in connection with competitive bidding, explaining that these rules, which are codified at 47 C.F.R. § 1.2105, would enhance the competitiveness of both the auction process and the post-auction market structure.⁶⁶ We propose to apply these same rules to the auction of the WCS spectrum.

56. Performance Requirements. In implementing auction procedures, the Commission is required under Section 309(j) of the Communications Act to include "safeguards to protect the public interest in the use of the spectrum" and performance requirements "to ensure prompt delivery of service to rural areas, to prevent stockpiling or warehousing of spectrum by licensees or permittees, and to promote investment in and rapid deployment of new technologies and services."⁶⁷ We have previously found that these objectives could be satisfied through build-out requirements (see, e.g., *Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, Fifth Report and Order*, PP Docket No. 93-253, FCC 94-178, 9 FCC Rcd 5532, 5570 (1994); *Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act - Competitive Bidding, Report and Order*, PP Docket No. 93-253 and MM Docket No. 94-131, FCC 95-230, 10 FCC Rcd 9589, 9659-60 (1995); *Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, Second Report and Order*, ET Docket No. 94-32, FCC 95-319, 11 FCC Rcd 624, 669-670 (1995)). We note, however, that we have never concluded that such requirements are mandated by Section 309(j).

57. Build-out requirements may encourage the provision of service to areas that would not necessarily receive service expeditiously solely through the operation of market forces. In addition, build-out requirements may also prevent stockpiling or warehousing of spectrum by allowing licenses to be recovered and made available to entities more willing and able to provide service expeditiously. As is discussed below, however, we have some concern as to whether applying these requirements to the licenses of the WCS spectrum is the best way to address Congress's concerns.

58. In this NPRM, we propose that a WCS licensee have the flexibility to offer a range of services, rather than being restricted to a particular use. See para. 9, *supra*. Given the broad range of services that may be deployed over WCS spectrum, it may be that performance requirements in the form of construction benchmarks are not necessary to meet Section 309(j)'s

⁶⁶ See 47 C.F.R. § 1.2105(c). See also *Second Report and Order*, 9 FCC Rcd at 2386-88; *Second Memorandum Opinion and Order*, 9 FCC Rcd 7245 at 7253-7254; *Erratum*, Mimeo No. 50278 (October 19, 1994); "Wireless Telecommunications Bureau Clarifies Spectrum Auction Anti-Collusion Rules," *Public Notice*, DA 95-2244 (rel. October 26, 1995); "Wireless Telecommunications Bureau Ponders Guidance on the Anti-Collusion Rule for D, E and F Block Bidders," *Public Notice*, DA 96-1460 (rel. August 28, 1996).

⁶⁷ 47 U.S.C. § 309(j)(4)(B).

objectives regarding warehousing and rapid deployment. Where we allow flexible use and the ultimate use (or uses) of a license is uncertain, simply requiring construction by itself does not sufficiently encourage the licensee to deploy assets in any particular market (*e.g.*, the voice or data market) or to provide any particular service. In addition, requiring construction by itself does not ensure that licenses are put to use in an efficient and procompetitive manner. Moreover, WCS construction requirements alone may not be effective to ensure the provision of service to rural areas.

59. We also note that build-out requirements can be harmful because they might result in one of several forms of uneconomic construction: construction in geographic areas different than those that would be served in a competitive environment; deployment at a different rate than would occur in a competitive environment; or deployment of technology and equipment differing from that which competition would dictate. Further, strict build-out requirements might have the unintended consequence of causing firms to build first in urban areas where the mandatory benchmarks could be met most cheaply, and thus slow the development of service to rural areas. It may be difficult to devise construction requirements that avoid these negative effects.

60. We believe we may be able to appropriately address the statutory concerns of preventing warehousing of spectrum and promoting rapid deployment of new technologies and services in other ways. First, the concern regarding warehousing may be addressed by awarding licenses through auctions. Auctioning itself provides economic incentives for licensees to utilize spectrum efficiently and to provide service rapidly. Second, the goal of promoting service to rural areas can be furthered by our proposal to allow partitioning and disaggregation. And, of course, the broad universal service policies of the Telecommunications Act of 1996 will contribute substantially to addressing this objective as well.

61. Commenters should address whether the auction and service rules that we are proposing here, together with our overall competition and universal service policies, constitute effective safeguards and performance requirements for WCS licensing, or whether specific construction requirements are also needed. If we decide not to impose construction requirements, we would reserve the right to review this policy in the future if we receive complaints related to Section 309(j)(4)(B), or if our own monitoring initiatives or investigations indicate that a reassessment is warranted. Thus, we propose to further reserve the right to impose construction requirements on a WCS license or licenses in the future if evidence of actual competitive or rural service problems arises and if construction requirements can effectively ameliorate those problems. We seek comment on these proposals and tentative conclusions.

5. Treatment of Designated Entities

62. Section 309(j) of the Communications Act provides that, when promulgating competitive bidding regulations, the Commission must "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women [commonly referred to as 'designated entities'] are given the opportunity to participate in the

provision of spectrum-based services."⁶⁸ As noted above, our allocation proposal contemplates that a WCS licensee will have broad flexibility in determining the range of services it will offer, and that licenses will be issued for broad geographic areas. Commenters should address the extent to which potentially high capital costs for constructing WCS systems affect the advisability of adopting specific provisions applicable to the WCS auction. We note that our proposed partitioning and disaggregation rules for WCS licensing may provide designated entities with additional opportunities to participate in the provision of WCS service.

63. The Appropriations Act requires that the Commission conduct the auction in a manner that ensures that all proceeds of the bidding are deposited in the Treasury no later than September 30, 1997.⁶⁹ Because of the expedited procedures imposed by the Appropriations Act, an entity acquiring a WCS authorization must be prepared to make payment on its full bid amount quickly. Thus, we tentatively conclude that installment payment plans would be an inappropriate mechanism for encouraging designated entity participation in the WCS auction. We invite comment on this tentative conclusion and on how the Congressional intent concerning designated entities can be effectuated in connection with competitive bidding for WCS licenses. For example, would bidding credits be appropriate in this service? If so, should they be limited to small businesses or provided to all designated entities? In addition, to the extent commenters suggest special provisions for small businesses, we also seek comment on the appropriate definition for small business. Additionally, should any special provisions be afforded to rural telephone companies? To the extent that commenters propose specific provisions to ensure the participation of minority and women-owned businesses, we also invite them to address how such provisions should be crafted to meet the relevant standards of judicial review (strict scrutiny for minorities and intermediate scrutiny for women).⁷⁰

H. Other Administrative Matters

64. We propose to update the entries for the 2300-2450 MHz band in the international table (columns 1 through 3 of the Table of Frequency Allocations ("Table"), 47 C.F.R. § 2.106) in accordance with the *Final Acts of the 1995 World Radiocommunication Conference*.⁷¹

⁶⁸ 47 U.S.C. § 309(j)(4)(D). *See also* 47 U.S.C. §§ 309(j)(3)(B) and (j)(4)(A).

⁶⁹ Appropriations Act, Section 3001(d).

⁷⁰ *See*, for relevant standards of review, *Adarand Constructors v. Peña*, 115 S.Ct. 2097 (1995) ("[Racial] classifications are constitutional only if they are narrowly tailored measures that further compelling governmental interests"), and *United States v. Virginia*, 116 S.Ct. 2264 (June 26, 1996) ("Parties who seek to defend gender-based governmental action must demonstrate an 'exceedingly persuasive justification' for that action").

⁷¹ *See* ITU *Final Acts of the World Radiocommunication Conference (WRC-95)*, Geneva, 1995. We are updating the entire band from 2300 to 2450 MHz in accordance with an agreement that the Commission's staff has made with the Federal Register. Specifically, the Federal Register staff requests that we display all frequency bands in the Table of Frequency Allocations between unbroken horizontal lines. This assist the Federal Register staff in their maintenance of the Table of Frequency Allocations in the Code of Federal Regulations. The International Table is provided for informational purposes only.

Specifically, the following international footnotes would be re-numbered using the new "S" numbering scheme: 664 (S5.282), 750B (S5.393), 751 (S5.394),⁷² 751A (S5.395), 751B (S5.396), and 752 (S5.150).⁷³

65. We also propose to update the entries for the 2300-2310, 2400-2402, and 2417-2450 MHz bands in the Government radio service allocations' column (column 4 of the Table) in accordance with the newly revised *NTIA Manual*.⁷⁴ Specifically, all existing Government allocations and footnote references would be deleted from the 2300-2310 and 2400-2402 MHz bands⁷⁵ and reference to footnote G123 would be added to both bands. Footnote G123, which permits Government operations in 2300-2310 and 2400-2402 MHz bands to continue only on a non-interference basis to authorized non-Government operations and requires that Government operations not hinder the implementation of any non-Government operation, would also be added to the list of Government footnotes. With regard to the 2417-2450 MHz band, the primary Government radiolocation service allocation would be downgraded to a secondary service and reference to footnote G124 would be added. Footnote G124, which states that the 2417-2450 MHz band has been reallocated to shared Government/non-Government use, would also be added to the list of Government footnotes.

66. We also propose to update the entries for the 2305-2320 and 2345-2360 MHz bands in the non-Government radio service allocations' column (column 5 of the Table) in accordance with our proposals herein. Specifically, we propose to add the fixed, mobile, and radiolocation services on a primary basis to the 2305-2320 and 2345-2360 MHz bands, to delete the reference

⁷² In addition to being re-numbered, the text of footnote 751 was modified. Specifically, aeronautical telemetry in the United States now has priority over other mobile service uses in the 2300-2390 MHz band (that is, the 2300-2310 MHz band has been added to the existing restriction). (At the next competent conference, we intend to have the aeronautical telemetry restriction removed from the 2300-2320 and 2345-2360 MHz bands in the United States.) In addition, aeronautical telemetry in Canada now has priority over other mobile service uses in the 2300-2483.5 MHz band (this is an entirely new restriction in Canada). Finally, Australia and Papua New Guinea have removed the aeronautical telemetry priority use restriction from the 2310-2390 MHz band.

⁷³ Footnote 752 was one of seven international footnotes that separately designated certain bands for industrial, scientific and medical applications. These international footnotes (534, 546, 548, 707, 752, 806, and 881) were combined into a single international footnote, S5.150.

⁷⁴ The 2300-2310 and 2400-2402 MHz bands were recently reallocated for exclusive non-Government use and the 2417-2450 MHz band was reallocated for shared Government/non-Government use. See Government footnotes G123 and G124. See also NTIA's *Manual of Regulations & Procedures for Federal Radio Frequency Management*, September 1995 Edition, Revisions for January and May 1996 at pages 4-63 and 4-64. Government radio service allocations are provided for informational purposes only.

⁷⁵ The primary Government radiolocation and secondary Government fixed and mobile service allocations and reference to footnotes US253 and G2 would be deleted from the 2300-2310 MHz band. The primary Government radiolocation service allocation and reference to footnote G2 would be deleted from the 2400-2402 band. The text of footnote G2 would also be updated to remove the 2300-2310 and 2400-2402 MHz bands from the list of Government radiolocation service allocations that are limited to the military services.

to footnote US253 from the 2300-2310 MHz band,⁷⁶ to add a reference to footnote USxxx to the 2305-2310 MHz band, and to add a reference to footnote USyyy in the 2310-2320 and 2345-2360 MHz bands.⁷⁷ Proposed United States footnote USxxx, which prohibits airborne and space-to-Earth transmissions in the 2305-2310 MHz band and which also requires that WCS operations in the 2305-2310 MHz band within 50 kilometers of the Deep Space receive site located on Fort Irwin, California be coordinated, and proposed United States footnote USyyy, which provides for continued secondary aeronautical telemetry use of the 2310-2320 and 2345-2360 MHz bands, would be added to the list of United States footnotes. In addition, we propose to update the entries for the 2305-2320 and 2345-2360 MHz bands in the rule part cross reference column (column 6 of the Table) to add a reference to the Wireless Communications Service.

IV. PROCEDURAL MATTERS

67. Ex Parte Presentation. This is a non-restricted notice and comment rule making proceeding. *Ex parte* presentations are permitted, provided they are disclosed as provided in Commission rules. *See generally* 47 C.F.R. Sections 1.1202, 1.1203, and 1.1206(a).

68. Authority. This action is taken pursuant to Sections 4(i), 7(a), 303(c), 303(f), 303(g), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 157(a), 303(c), 303(f), 303(g), and 303(r) and the Omnibus Consolidated Appropriations Act, 1997, P.L. 104-208, 110 Stat. 3009 (1996).

69. Comment. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, interested parties may file comments on or before **December 4, 1996**, and reply comments on or before **December 16, 1996**. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. To file formally in this proceeding, participants must file an original and five copies of all comments, reply comments, and supporting comments. If participants want each Commissioner to receive a personal copy of their comments, an original plus ten comments must be filed. Comments and reply comments should be sent to Office of the Secretary, Federal Communications Commission, Washington, DC 20554. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center (Room 239) of the Federal Communications Commission, 1919 M Street, N.W., Washington, DC 20554.

⁷⁶ The 2300-2310 MHz band was recently reallocated for exclusive non-Government use. Government operations may continue in the 2300-2310 MHz band only on a non-interference basis to authorized non-Government operations. *See* Appendix for Government footnote G123. Thus, the current requirements contained in footnote US253 are repetitive and unneeded. (In addition, the text of footnote US253 would be deleted from the list of United States footnotes.)

⁷⁷ Specifically, the requirements currently listed in footnote US276 are proposed to be split into two footnotes, revised footnote US276 and new footnote USyyy. This proposal is made in order to clarify that continued aeronautical telemetering and associated telecommand operations in the 2310-2320 and 2345-2360 MHz bands are on a secondary basis to WCS operations. The operating restrictions in the 2320-2345 and 2360-2390 MHz bands are unchanged and are contained in revised footnote US276.

70. Additional Information. For further information concerning this rule making proceeding contact Tom Mooring at (202) 418-2450, internet: tmooring@fcc.gov, Office of Engineering and Technology, or Matthew Moses or Joshua Roland at (202) 418-0660, Wireless Telecommunications Bureau, Federal Communications Commission, Washington, DC 20554.

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary

Appendix: Proposed Rules

Parts 1, 2, 27, and 97 of title 47 of the Code of Federal Regulations are proposed to be amended as follows:

PART 1 -- PRACTICE AND PROCEDURE

1. The authority citation for part 1 continues to read as follows:

AUTHORITY: 47 U.S.C. 151, 154, 303, and 309(j) unless otherwise noted.

2. Paragraph (b)(1) and the first sentence of paragraph (b)(2) of section 1.1307 and the entries for the Wireless Communications Service in the Table are revised to read as follows:

§ 1.1307 Actions which may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.

* * * * *

(b) * * *

(1) The exposure limits in section 1.1310 are generally applicable to all facilities, operations and transmitters regulated by the Commission. However, a determination of compliance with the exposure limits in section 1.1310 (routine environmental evaluation), and preparation of an EA if the limits are exceeded, is necessary only for facilities, operations and transmitters that fall into the categories listed in Table 1, or those specified in paragraph (b)(2) of this section. All other facilities, operations and transmitters are categorically excluded from making such studies or preparing an EA, except as indicated in paragraphs (c) and (d) of this section. For purposes of Table 1, "rooftop" means the roof or otherwise outside, topmost level or levels of a building structure that is occupied as a workplace or residence and where either workers or the general public may have access. The term "power" in column 2 of Table 1 refers to total operating power of the transmitting operation in question in terms of effective radiated power (ERP), equivalent isotropically radiated power (EIRP), or peak envelope power (PEP), as defined in section 2.1 of this chapter. For the case of the Cellular Radiotelephone Service, subpart H of part 22 of this chapter; the Personal Communications Service, part 24 of this chapter, the Wireless Communications Service, part 27 of this chapter and covered Specialized Mobile Radio Service operations, part 90 of this chapter, the phrase "total power of all channels" in column 2 of Table 1 means the sum of the ERP or EIRP of all co-located simultaneously operating transmitters of the facility. When applying the criteria of Table 1, radiation in all directions should be considered. For the case of transmitting facilities using sectorized transmitting antennas, applicants and licensees should apply the criteria to all transmitting channels in a given sector, noting that for a highly directional antenna there is relatively little contribution to ERP or EIRP summation for other directions.

TABLE 1: TRANSMITTERS, FACILITIES AND OPERATIONS SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

SERVICE (TITLE 47 CFR RULE PART)	EVALUATION REQUIRED IF:
*	*
Wireless Communications Service (for those services with similar or identical operating characteristics or functions to the Digital Audio Radio Service) (part 27)	all included
Wireless Communications Service (for those services with similar or identical operating characteristics or functions to the Multipoint Distribution Service, Cellular Radiotelephone Service, Personal Communications Service, Paging or Radiotelephone Service, or Paging Operations or "covered" Specialized Mobile Radio Services within the Private Land Mobile Radio Services) (part 27)	total power of all channels > 2000 W ERP (3280 W EIRP)
*	*

* Note: * * *

(2) Mobile and portable transmitting devices that operate in the Cellular Radiotelephone Service, the Personal Communications Services (PCS), the Wireless Communications Service, the Satellite Communications Services, the Maritime Services (ship earth stations only) covered Specialized Mobile Radio Service, providers authorized under subpart H of part 22, part 24, part 25, part 27, part 80, and part 90 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use, as specified in sections 2.1091 and 2.1093 of this chapter. * * *

* * * * *

3. New paragraph (a)(9) is added to section 1.2102 to read as follows:

§ 1.2102 Eligibility of applications for competitive bidding.

(a) * * *

(9) Wireless Communications Service (WCS) (see part 27 of this chapter).

* * * * *

**PART 2 -- FREQUENCY ALLOCATIONS AND RADIO TREATY
MATTERS; GENERAL RULES AND REGULATIONS**

1. The authority citation for part 2 continues to read as follows:

AUTHORITY: Section 4, 302, 303, and 307 of the Communications Act of 1934, as amended, 47 U.S.C. sections 154, 302, 303 and 307, unless otherwise noted.

2. Section 2.106, the Table of Frequency Allocations, is amended as follows:

- a. Remove the existing entries for 2300-2450 MHz.
- b. Add entries in numerical order for 2300-2450 MHz.
- c. In the International Footnotes under heading I., add footnotes S5.150, S5.282, S5.393, S5.394, S5.395, and S5.396.
- d. In the International Footnotes under heading II., remove footnotes 750B, 751, 751A, and 751B.
- e. Remove United States footnote US253.
- f. Add United States footnotes USxxx and USyyy.
- g. Revise United States footnotes US276 and US328.
- h. Add Government footnotes G120, G123 and G124.
- i. Revise Government footnote G2.

The revisions, deletions, and additions read as follows:

§ 2.106 Table of Frequency Allocations

* * * * *

International table			United States table		FCC use designators	
Region 1 -- allocation MHz	Region 2 -- allocation MHz	Region 3 -- allocation MHz	Government	Non-Government	Rule part(s)	Special-use frequencies
(1)	(2)	(3)	Allocation MHz (4)	Allocation MHz (5)	(6)	(7)
*	*	*	*	*	*	*
2300 – 2305 FIXED MOBILE Amateur Radiolocation	2300 – 2305 FIXED MOBILE RADIOLOCATIO N Amateur S5.394	2300 – 2305 FIXED MOBILE RADIOLOCATIO N Amateur	2300 – 2305 G123	2300 – 2305 Amateur	Amateur (97)	
2305 – 2310 FIXED MOBILE Amateur Radiolocation	2305 – 2310 FIXED MOBILE RADIOLOCATIO N Amateur S5.394	2305 – 2310 FIXED MOBILE RADIOLOCATIO N Amateur	2305 – 2310 USxxx G123	2305 – 2310 FIXED MOBILE RADIOLOCATIO N Amateur USxxx	WIRELESS COMMUNICATIONS (27) Amateur (97)	
2310 – 2320 FIXED MOBILE Amateur Radiolocation S5.395	2310 – 2320 FIXED MOBILE RADIOLOCATIO N Amateur S5.393 S5.394 S5.396	2310 – 2320 FIXED MOBILE RADIOLOCATIO N Amateur S5.393 S5.396	2310 – 2320 Fixed Mobile USyyy Radiolocation G2 S5.396 US327 US328 G120	2310 – 2320 BROADCASTING- SATELLITE US327 FIXED MOBILE USyyy RADIOLOCATIO N S5.396 US328	WIRELESS COMMUNICATIONS (27)	Digital Audio Radio Services
2320 – 2345 FIXED MOBILE Amateur Radiolocation S5.395	2320 – 2345 FIXED MOBILE RADIOLOCATIO N Amateur S5.393 S5.394 S5.396	2320 – 2345 FIXED MOBILE RADIOLOCATIO N Amateur S5.393 S5.396	2320 – 2345 Fixed Mobile US276 Radiolocation G2 S5.396 US327 US328 G120	2320 – 2345 BROADCASTING- SATELLITE US327 Mobile US276 S5.396 US328		Digital Audio Radio Services

2345– 2360 FIXED MOBILE Amateur Radiolocation S5.395	2345 – 236 0 FIXE D MOBIL E RADIOLOCATIO N Amateu r S5.393 S5.394 S5.396	2345 – 236 0 FIXED MOBILE RADIOLOCATIO N Amateur S5.393 S5.396	2345 – 2360 Fixed Mobile USyyy Radiolocation G2 S5.396 US327 US328 G120	2345 – 2360 BROADCASTING- SATELLITE US327 FIXE D MOBIL E USyyy RADIOLOCATIO N S5.396 US328	WIRELESS COMMUNICATIONS (27)	Digital Audio Radio Services
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International table			United States table		FCC use designators	
Region 1 -- allocation MHz	Region 2 -- allocation MHz	Region 3 -- allocation MHz	Government	Non-Government	Rule part(s)	Special-use frequencies
(1)	(2)	(3)	Allocation MHz (4)	Allocation MHz (5)	(6)	(7)
2360 – 2390 FIXED MOBILE Amateur Radiolocation	2360 – 2390 0 FIXE D MOBIL E RADIOLOCATIO N Amateu r S5.394	2360 – 2390 0 FIXED MOBILE RADIOLOCATIO N Amateur	2360 – 2390 MOBILE US276 RADIOLOCATION G2 Fixed G120	2360 – 2390 MOBILE US276		
2390 – 2400 FIXED MOBILE Amateur Radiolocation	2390 – 2400 0 FIXE D MOBIL E RADIOLOCATIO N Amateur S5.394	2390 – 2400 0 FIXED MOBILE RADIOLOCATIO N Amateur	2390 – 2400 G122	2390 – 2400 AMATEUR	AMATEUR (97) Radio Frequency Devices (15)	
2400 – 2402 FIXED MOBILE Amateur Radiolocation S5.150 S5.282	2400 – 2402 2 FIXE D MOBIL E RADIOLOCATIO N Amateu r S5.150 S5.282 S5.394	2400 – 2402 2 FIXED MOBILE RADIOLOCATIO N Amateur S5.150 S5.282	2400 – 2402 S5.150 G123	2400 – 2402 Amateur S5.150 S5.282	Amateur (97)	
2402 – 2417 FIXED MOBILE Amateur Radiolocation S5.150 S5.282	2402 – 2417 7 FIXE D MOBIL E RADIOLOCATIO N Amateu r S5.150 S5.282 S5.394	2402 – 2417 7 FIXED MOBILE RADIOLOCATIO N Amateur S5.150 S5.282	2402 – 2417 S5.150 G122	2402 – 2417 AMATEUR S5.150 S5.282	AMATEUR (97) Radio Frequency Devices (15)	

2417 – 2450 FIXED MOBILE Amateur Radiolocation S5.150 S5.282	2417 – 2450 0 FIXE D MOBIL E RADIOLOCATIO N Amateu r S5.150 S5.282 S5.394	2417 – 2450 0 FIXED MOBILE RADIOLOCATIO N Amateur S5.150 S5.282	2417 – 2450 Radiolocation G2 S5.150 S5.282 G124	2417 – 2450 Amateur S5.150 S5.282	Amateur (97)	
*	*	*	*	*	*	*

INTERNATIONAL FOOTNOTES

* * * * *

I. "S" Numbering Scheme

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S5.150 The following bands:

13533-13567 kHz (centre frequency 13560 kHz),
26957-27283 kHz (centre frequency 27120 kHz),
40.66-40.70 MHz (centre frequency 40.68 MHz),
902-928 MHz in Region 2 (centre frequency 915 MHz),
2400-2500 MHz (centre frequency 2450 MHz),
5725-5875 MHz (centre frequency 5800 MHz), and
24-24.25 GHz (centre frequency 24.125 GHz)

are also designated for industrial, scientific and medical (ISM) applications. Radiocommunication services operating within these bands must accept harmful interference which may be caused by these applications. ISM equipment operating in these bands is subject to the provisions of No. 1815/S15.13.

* * * * *

S5.282 In the bands 435-438 MHz, 1260-1270 MHz, 2400-2450 MHz, 3400-3410 MHz (in Regions 2 and 3 only) and 5650-5670 MHz, the amateur-satellite service may operate subject to not causing harmful interference to other services operating in accordance with the Table (see No. S5.43). Administrations authorizing such use shall ensure that any harmful interference caused by emissions from a station in the amateur-satellite service is immediately eliminated in accordance with the provisions of No. 2741/S25.11. The use of the bands 1260-1270 MHz and 5650-5670 MHz by the amateur-satellite service is limited to the Earth-to-space direction.

* * * * *

S5.393 Additional allocation: in the United States and India, the band 2310-2360 MHz is also allocated to the broadcasting-satellite service (sound) and complementary terrestrial sound broadcasting service on a primary basis. Such use is limited to digital audio broadcasting and is subject to the provisions of Resolution 528 (WARC-92).

S5.394 In the United States, the use of the band 2300-2390 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services. In Canada, the use of the band 2300-2483.5 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services.

S5.395 In France, the use of the band 2310-2360 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile service.

S5.396 Space stations of the broadcasting-satellite service in the band 2310-2360 MHz operating in accordance with No. S5.393 that may affect the services to which this band is allocated in other countries shall be coordinated and notified in accordance with Resolution 33. Complementary terrestrial broadcasting stations shall be subject to bilateral coordination with neighboring countries prior to their bringing into use.

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UNITED STATES (US) FOOTNOTES

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US276 Except as otherwise provided for herein, use of the bands 2320-2345 and 2360-2390 MHz by the mobile service is limited to aeronautical telemetering and associated telecommand operations for flight testing of manned or unmanned aircraft, missiles or major components thereof. The following four frequencies are shared on a co-equal basis for telemetering and associated telecommand operations of expendable and re-usable launch vehicles whether or not such operations involve flight testing: 2332.5, 2364.5, 2370.5, and 2382.5 MHz. All other mobile telemetering uses shall be secondary to the above uses.

* * * * *

US328 In the band 2320-2345 MHz, the mobile and radiolocation services are allocated on a primary basis until 1 January 1997 or until broadcasting-satellite (sound) service has been brought into use in such a manner as to affect or be affected by the mobile and radiolocation services in those service areas, whichever is later. The broadcasting-satellite (sound) service during implementation should also take cognizance of the expendable and reusable launch vehicle frequencies 2312.5, 2332.5, and 2352.5 MHz, to minimize the impact on this mobile service use to the extent possible.

* * * * *

USxxx In the 2305-2310 MHz band, airborne and space-to-Earth operations are prohibited. Additionally, in the 2305-2310 MHz band, Wireless Communications Service operations within 50 kilometers of 35° 20' North Latitude and 116° 53' West Longitude shall be coordinated on a case-by-case basis through the frequency assignment subcommittee in order to minimize harmful interference to NASA's Goldstone Deep Space facility.

USyyy The bands 2310-2320 and 2345-2360 MHz are also available for aeronautical telemetering and associated telecommand operations for flight testing of manned or unmanned

aircraft, missiles or major components thereof on a secondary basis to the Wireless Communications Service. The following two frequencies are shared on a co-equal basis for telemetering and associated telecommand operations of expendable and re-usable launch vehicles whether or not such operations involve flight testing: 2312.5 and 2352.5 MHz. Other mobile telemetering uses may be provided on a non-interference basis to the above uses.

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GOVERNMENT FOOTNOTES

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G2 In the bands 216-225, 420-450 (except as provided by US217), 890-902, 928-942, 1300-1400, 2310-2390, 2417-2450, 2700-2900, 5650-5925, and 9000-9200 MHz, the Government radiolocation is limited to the military services.

* * * * *

G120 Development of airborne primary radars in the band 2310-2390 MHz with peak transmitter power in excess of 250 watts for use in the United States is not permitted.

* * * * *

G123 The bands 2300-2310 and 2400-2402 MHz were identified for reallocation, effective August 10, 1995, for exclusive non-Government use under Title VI of the Omnibus Budget Reconciliation Act of 1993. Effective August 10, 1995, any Government operations in these bands are on a non-interference basis to authorized non-Government operations and shall not hinder the implementation of any non-Government operations.

G124 The band 2417-2450 MHz was identified for reallocation, effective August 10, 1995, for mixed Government and non-Government use under Title VI of the Omnibus Budget Reconciliation Act of 1993.

3. Section 2.1091 is amended by revising the first sentence in paragraph (c) to read as follows:

§2.1091 Radiofrequency radiation exposure evaluation: mobile and unlicensed devices.

* * * * *

(c) Mobile devices that operate in the Cellular Radiotelephone Service, the Personal Communications Services, the Wireless Communications Service, the Satellite Communications Services, the Maritime Services and the Specialized Mobile Radio Service authorized under subpart H of part 22 of this chapter, part 24 of this chapter, part 25 of this chapter, part 27 of this

chapter (only mobile devices with similar or identical operating characteristics to those authorized under subpart H of part 22, part 24, and "covered" SMR under part 90), part 80 of this chapter (ship earth station devices only) and part 90 of this chapter ("covered" SMR devices only, as defined in the note to Table 1 of section 1.1307(b)(1) of this chapter), are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use if their effective radiated power (ERP) is 1.5 watts or more. * * *

* * * * *

4. Section 2.1093 is amended by revising the first sentence of paragraph (c) to read as follows:

§ 2.1093 Radiofrequency radiation exposure evaluation: portable devices.

* * * * *

(c) Portable devices that operate in the Cellular Radiotelephone Service, the Personal Communications Services, the Wireless Communications Service, the Satellite Communications services, the Maritime Services and the Specialized Mobile Radio Service authorized under subpart H of part 22 of this chapter, part 24 of this chapter, part 25 of this chapter, part 27 of this chapter (only portable devices with similar or identical operating characteristics to those authorized under subpart H of part 22, part 24, and "covered" SMR under part 90), part 80 of this chapter (ship earth station devices only), part 90 of this chapter ("covered" SMR devices only, as defined in the note to Table 1 of section 1.1307(b)(1) of this chapter), and portable unlicensed personal communication service and millimeter wave devices authorized under section 15.253, section 15.255 or subpart D of part 15 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use. * * *

* * * * *

5. A new part 27 is added to read as follows:

PART 27 -- WIRELESS COMMUNICATIONS SERVICE

Subpart A -- General Information

Sec.

- 27.1 Basis and purpose.
- 27.2 Permissible communications.
- 27.3 Other applicable rule parts.
- 27.4 Terms and definitions.

Subpart B -- Applications and Licenses

- 27.11 Initial authorization.
- 27.12 Eligibility.
- 27.13 License period.
- 27.14 Criteria for comparative renewal proceedings.
- 27.15 Geographic partitioning and spectrum disaggregation.
- 27.16 Franchising

Subpart C -- Technical Standards

- 27.51 Equipment authorization.
- 27.52 RF safety.
- 27.53 Emission limits.
- 27.54 Frequency stability.
- 27.55 Field strength limits.
- 27.56 Antenna structures; air navigation safety.
- 27.57 International coordination.

Subpart D -- Competitive Bidding Procedures for WCS

- 27.201 WCS subject to competitive bidding.
- 27.202 Competitive bidding mechanisms.
- 27.203 Withdrawal, default and disqualification payments.
- 27.204 Bidding application and certification procedures
- 27.205 Submission of upfront payments.
- 27.206 Submission of down payment and filing of long-form applications.
- 27.207 Procedures for filing petitions to deny against long-form WCS applications.

Subpart E -- Application, Licensing, and Processing Rules for WCS

- 27.301 Authorization required.
- 27.302 Eligibility.
- 27.303 Formal and informal applications.
- 27.304 Filing of WCS applications, fees, and numbers of copies.
- 27.305 Standard application forms and permissive changes or minor modifications for the Wireless Communications Service.
- 27.306 Miscellaneous forms.
- 27.307 General application requirements.
- 27.308 Technical content of applications; maintenance of list of station locations.
- 27.310 Waiver of rules.
- 27.311 Defective applications.
- 27.312 Inconsistent or conflicting applications.
- 27.313 Amendment of applications for Wireless Communications Service (other than applications filed on FCC Form 175).

- 27.314 Application for temporary authorizations.
- 27.315 Receipt of application; applications in the Wireless Communications Service filed on FCC Form 175 and other applications in the WCS Service.
- 27.316 Public notice period.
- 27.317 Dismissal and return of applications.
- 27.318 Opposition to applications.
- 27.319 Ownership changes and agreements to amend or dismiss applications or pleadings.
- 27.320 Mutually exclusive applications.
- 27.321 Consideration of applications.
- 27.322 Post-auction divestitures.
- 27.323 Transfer of control or assignment of station authorization.
- 27.324 Termination of authorization.

AUTHORITY: 47 U.S.C. sections 154, 301, 302, 303, 307, 309 and 332, unless otherwise noted.

Subpart A -- General Information

§ 27.1 Basis and purpose.

This section contains the statutory basis for this part of the rules and provides the purpose for which this part is issued.

(a) Basis. The rules for the Wireless Communications Service (WCS) in this part are promulgated under the provisions of the Communications Act of 1934, as amended, that vest authority in the Federal Communications Commission to regulate radio transmission and to issue licenses for radio stations.

(b) Purpose. This part states the conditions under which the 2305-2320 MHz and 2345-2360 MHz bands are made available and licensed for the provision of WCS.

(c) Scope. The rules in this part apply only to stations authorized under this part.

§ 27.2 Permissible communications.

Subject to the rules contained herein, fixed, mobile and radiolocation services may be provided using the 2305-2320 and 2345-2360 MHz bands. In addition, satellite digital audio radio service (DARS) may be provided using the 2310-2320 and 2345-2360 MHz bands. Satellite DARS service shall be provided in manner consistent with part 25 of this chapter.

§ 27.3 Other applicable rule parts.

Other FCC rule parts applicable to the Wireless Communications Service include the following:

(a) Part 0. This part describes the Commission's organization and delegations of authority. Part 0 of this chapter also lists available Commission publications, standards and procedures for access to Commission records, and location of Commission Field Offices.

(b) Part 1. This part includes rules of practice and procedure for license applications, adjudicatory proceedings, procedures for reconsideration and review of the Commission's actions; provisions concerning violation notices and forfeiture proceedings; competitive bidding procedures, and the environmental requirements that, if applicable, must be complied with prior to the initiation of construction.

(c) Part 2. This part contains the Table of Frequency Allocations and special requirements in international regulations, recommendations, agreements, and treaties. This part also contains standards and procedures concerning the marketing and importation of radio frequency devices, and for obtaining equipment authorization.

(d) Part 5. This part contains rules prescribing the manner in which parts of the radio frequency spectrum may be made available for experimentation.

(e) Part 17. This part contains requirements for construction, marking and lighting of antenna towers.

(f) Part 25. This part contains the requirements for satellite communications, including the satellite DARS.

(g) Part 68. This part contains technical standards for connection of terminal equipment to the telephone network.

§ 27.4 Terms and definitions.

Assigned Frequency. The center of the frequency band assigned to a station.

Authorized Bandwidth. The maximum width of the band of frequencies permitted to be used by a station. This is normally considered to be the necessary or occupied bandwidth, whichever is greater.

Average Terrain. The average elevation of terrain between 3 and 16 kilometers from the antenna site.

Effective Radiated Power (e.r.p.) (in a given direction). The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

Equivalent Isotropically Radiated Power (e.i.r.p.). The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

Fixed Service. A radio communication service between specified fixed points.

Fixed Station. A station in the fixed service.

Land Mobile Service. A mobile service between base stations and land mobile stations, or between land mobile stations.

Land Mobile Station. A mobile station in the land mobile service capable of surface movement within the geographic limits of a country or continent.

Land Station. A station in the mobile service not intended to be used while in motion.

Mobile Service. A radio communication service between mobile and land stations, or between mobile stations.

Mobile Station. A station in the mobile service intended to be used while in motion or during halts at unspecified points.

National Geodetic Reference System (NGRS). The name given to all geodetic control data contained in the National Geodetic Survey (NGS) data base. (Source: National Geodetic Survey, U.S. Department of Commerce)

Radiodetermination. The determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radio waves.

Radiolocation. Radiodetermination used for purposes other than those of radionavigation.

Radionavigation. Radiodetermination used for the purpose of navigation, including obstruction warning.

Satellite Digital Audio Radio Service ("satellite DARS"). A radiocommunication service in which compact disc quality programming is digitally transmitted by one or more space stations.

Wireless Communications Service. A radiocommunication service that encompasses fixed, mobile, satellite DARS, and radiolocation services.

Subpart B -- Applications and Licenses

§ 27.11 Initial authorization.

- (a) An applicant must file an application for an initial WCS authorization.
- (b) The initial WCS authorizations shall be granted for XX megahertz of spectrum and shall be on a [geographical basis to be determined].
- (c) The initial WCS authorizations shall be a blanket license. Applications for individual sites are not required and will not be accepted.

§ 27.12 Eligibility.

Any entity, other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. section 310, is eligible to hold a license under this part.

§ 27.13 License period.

Licenses shall be granted for ten year terms from the date of original issuance or renewal.

§ 27.14 Criteria for comparative renewal proceedings.

(a) A renewal applicant involved in a comparative renewal proceeding shall receive a preference, commonly referred to as a renewal expectancy, which is the most important comparative factor to be considered in the proceeding, if its past record for the relevant license period demonstrates that the renewal applicant:

- (1) Has provided "substantial" service during its past license term. In addition, the communications provided must be sound, favorable, and substantially above a level of mediocre service which might just minimally warrant renewal; and
- (2) Has substantially complied with applicable Commission rules, policies and the Communications Act.

(b) At five and ten years from the date of original issuance or renewal, the licensee shall report to the Commission what it has built and the percentage of its service area population that it serves. The Commission shall take these reports into account during its consideration of the renewal application.

§ 27.15 Geographic partitioning and spectrum disaggregation.

- (a) Geographic partitioning and spectrum disaggregation are permitted without restriction.

(b) In the event that the WCS license is partitioned or disaggregated, any partitionee/disaggragatee shall be authorized to hold its license for the remainder of the partitioner's/disaggregator's original ten-year license term.

§ 27.16 Franchising.

In the event that the WCS licensee franchises portions of its spectrum and geographic service area on a leased basis, the WCS licensee shall retain ultimate responsibility for meeting interference and other licensing requirements.

Subpart C -- Technical Standards

§ 27.51 Equipment authorization.

(a) Each transmitter utilized for operation under this part and each transmitter marketed, as set forth in section 2.803 of this chapter, must be of a type that has been authorized by the Commission under its type acceptance procedure.

(b) The Commission periodically publishes a list of type accepted equipment, entitled "Radio Equipment List, Equipment Accepted for Licensing." Copies of this list are available for public reference at the Commission's offices in Washington, D.C., at each of its field offices, and may be ordered from its copy contractor.

(c) Any manufacturer of radio transmitting equipment to be used in these services may request equipment authorization following the procedures set forth in subpart J of part 2 of this chapter. Equipment authorization for an individual transmitter may be requested by an applicant for a station authorization by following the procedures set forth in part 2 of this chapter. Such equipment if approved or accepted will not normally be included in the Commission's Radio Equipment List but will be individually enumerated on the station authorization.

§ 27.52 RF safety.

Licensees and manufacturers are subject to the radio frequency radiation exposure requirements specified in sections 1.1307(b), 2.1091, and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile or portable devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

§ 27.53 Emission limits.

(a) The peak power of any emission outside the licensee's bands of operation shall be attenuated below the maximum peak spectral power density (p) within the band of operation by the following amounts:

(1) For fixed operations: By a factor not less than $43 + 10 \log (p)$ dB on all frequencies between 2300 and 2305 MHz and above 2360 MHz; and not less than $70 + 10 \log (p)$ dB on all frequencies below 2300 MHz and between 2320-2345 MHz band;

(2) For mobile operations: By a factor not less than $43 + 10 \log (p)$ dB on all frequencies between 2300 and 2305 MHz, between 2320 and 2345 MHz, and above 2360 MHz; and not less than $70 + 10 \log (p)$ dB on all frequencies below 2300 MHz;

(3) For the purposes of this section, radiolocation shall be classified as either a fixed or mobile service, depending upon the application; and

(4) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency bands of operation a smaller resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, provided the measured energy is integrated to provide the total energy in a 1 MHz bandwidth.

(b) For WCS satellite DARS operations: The limits set forth in section 25.202(f) of this chapter apply.

(c) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close the edges, both upper and lower, of the license's bands of operation as the design permits.

(d) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

§ 27.54 Frequency stability.

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

§ 27.55 Field strength limits.

If geographic partitioning is employed, the predicted or measured median field strength at any location on the border of the WCS service area shall not exceed 47 dBuV/m unless the parties agree to a higher field strength.

§ 27.56 Antenna structures; air navigation safety.

A licensee that owns its antenna structures must not allow these antenna structures to become a hazard to air navigation. In general, antenna structure owners are responsible for registering antenna structures with the FCC if required by part 17 of this chapter, and for installing and maintaining any required marking and lighting. However, in the event of default of this responsibility by an antenna structure owner, the FCC permittee or licensee authorized to use an affected antenna structure will be held responsible by the FCC for ensuring that the antenna structure continues to meet the requirements of part 17 of this chapter. See section 17.6 of this chapter.

(a) Marking and lighting. Antenna structures must be marked, lighted and maintained in accordance with part 17 of this chapter and all applicable rules and requirements of the Federal Aviation Administration.

(b) Maintenance contracts. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) may enter into contracts with other entities to monitor and carry out necessary maintenance of antenna structures. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) that make such contractual arrangements continue to be responsible for the maintenance of antenna structures in regard to air navigation safety.

§ 27.57 International coordination.

WCS operations shall protect existing Canadian and Mexican operations in the 2305-2320 and 2345-2360 MHz bands. WCS operations along the US/Canadian and US/Mexican border areas shall be subject to coordination, as appropriate. In addition, satellite DARS operations on WCS spectrum shall be subject to international coordination procedures.

Subpart D -- Competitive Bidding Procedures for WCS

§ 27.201 WCS subject to competitive bidding.

Mutually exclusive initial applications to provide WCS service are subject to competitive bidding procedures. In addition to the rules set forth in this subpart, the following competitive bidding rules found in part 1, subpart Q of this chapter shall apply to WCS: 1.2101, 1.2102, 1.2103, 1.2104(a) through (f), (h) and (i), 1.2105(b) through (c), 1.2109 and 1.2111 of this chapter.

§ 27.202 Competitive bidding mechanisms.

In addition to the provisions of section 1.2104(a) through (f), (h) and (i), the following provisions will apply to WCS:

(a) Tie Bids. Where a tie bid occurs, the high bidder will be determined by the order in which the bids were received by the Commission.

(b) Maximum Bid Increments. The Commission may, by announcement before or during the auction, require maximum bid increments in dollar or percentage terms.

§ 27.203 Withdrawal, default and disqualification payments.

When the Commission conducts a simultaneous multiple round auction pursuant to section 27.202, the Commission will impose payments on bidders who withdraw high bids during the course of an auction, or who default on payments due after an auction closes or who are disqualified.

(a) Bid withdrawal prior to close of auction. A bidder who withdraws a high bid during the course of an auction will be subject to a payment equal to the difference between the amount bid and the amount of the winning bid the next time the license is offered by the Commission. No withdrawal payment would be assessed if the subsequent winning bid exceeds the withdrawn bid. This payment amount will be deducted from any upfront payments or down payments that the withdrawing bidder has deposited with the Commission.

(b) Default or disqualification after close of auction. If a high bidder defaults or is disqualified after the close of such an auction, the defaulting bidder will be subject to the payment in paragraph (a) of this section plus an additional payment equal to 3 percent of the subsequent winning bid. If the subsequent winning bid exceeds the defaulting bidder's bid amount, the 3 percent payment will be calculated based on the defaulting bidder's bid amount. These amounts will be deducted from any upfront payments or down payments that the defaulting or disqualified bidder has deposited with the Commission.

(c) Erroneous bids. If at any point during an auction an erroneous bid is withdrawn in the same round in which it was submitted, the bid withdrawal payment will be the greater of:

(1) The minimum bid increment for that license and round; and

(2) The standard bid withdrawal payment, as defined in paragraph (a) of this section, calculated as if the bidder had made the minimum accepted bid. If an erroneous bid is withdrawn in the round immediately following the round in which it was submitted, and the auction is in Stage I or Stage II, the withdrawal payment will be the greater of:

(i) Two times the minimum bid increment during the round in which the erroneous bid was submitted, and

(ii) The standard withdrawal payment, as defined in paragraph (a) of this section, calculated as if the bidder had made a bid one bid increment above the minimum accepted bid. If an

erroneous bid is withdrawn two or more rounds following the round in which it was submitted, the bidder will not be eligible for any reduction in the bid withdrawal payment as defined in paragraph (a) of this section. During Stage III of an auction, if an erroneous bid is not withdrawn during the round in which it was submitted, the bidder will not be eligible for any reduction in the bid withdrawal payment as defined in paragraph (a).

§ 27.204 Bidding application and certification procedures.

(a) Submission of Short-Form Application (FCC Form 175). In order to be eligible to bid, an applicant must timely submit, by means of electronic filing, a short-form application (FCC Form 175). Unless otherwise provided by public notice, the Form 175 need not be accompanied by an upfront payment (see section 27.205).

(1) All Form 175s will be due on the date specified by public notice.

(2) The Form 175 must contain the following information:

(i) Identification of each license on which the applicant wishes to bid;

(ii) The applicant's name, if the applicant is an individual. If the applicant is a corporation, then the short-form application will require the name and address of the corporate office and the name and title of an officer or director. If the applicant is a partnership, then the application will require the name, citizenship and address of all partners, and, if a partner is not a natural person, then the name and title of a responsible person should be included as well. If the applicant is a trust, then the name and address of the trustee will be required. If the applicant is none of the above, then it must identify and describe itself and its principals or other responsible persons;

(iii) The identity of the person(s) authorized to make or withdraw a bid;

(iv) Certification that the applicant is legally, technically, financially and otherwise qualified pursuant to section 308(b) of the Communications Act of 1934, as amended. The Commission will accept applications certifying that a request for waiver or other relief from the requirements of section 310 is pending;

(v) Certification that the applicant is in compliance with the foreign ownership provisions of section 310 of the Communications Act of 1934, as amended;

(vi) Certification that the applicant is and will, during the pendency of its application(s), remain in compliance with any service-specific qualifications applicable to the licenses on which the applicant intends to bid including, but not limited to, financial qualifications. The Commission may require certification in certain services that the applicant will, following grant of a license, come into compliance with certain service-specific rules, including, but not limited to, ownership eligibility limitations;

(vii) An exhibit, certified as truthful under penalty of perjury, identifying all parties with whom the applicant has entered into partnerships, joint ventures, consortia or other agreements, arrangements or understandings of any kind relating to the licenses being auctioned, including any such agreements relating to the post-auction market structure.

(viii) Certification under penalty of perjury that it has not entered and will not enter into any explicit or implicit agreements, arrangements or understandings of any kind with any parties other than those identified pursuant to paragraph (a)(2)(viii) of this section regarding the amount of their bids, bidding strategies or the particular licenses on which they will or will not bid; and

(ix) Certification under penalty of perjury that it is not in default on any Commission licenses and that it is not delinquent on any extension of credit from any federal agency;

Note to paragraph (a): The Commission may also request applicants to submit additional information for informational purposes to aid in its preparation of required reports to Congress.

(b) **Modification and Amendment of Application.** Applicants will be permitted to amend their Form 175 applications to make minor amendments to correct minor errors or defects such as typographical errors. Applicants will also be permitted to amend FCC Form 175 to make changes to the information required by section 27.204(a) (such as ownership changes or changes in the identification of parties to bidding consortia), provided such changes do not result in a change in control of the applicant and do not involve another applicant (or parties in interest to an applicant) who has applied for licenses in any of the same geographic license areas as the applicant. Amendments which change control of the applicant will be considered major amendments. An FCC Form 175 which is amended by a major amendment will be considered to be newly filed and cannot be resubmitted after applicable filing deadlines. See also section 1.2105 of this chapter.

§ 27.205 Submission of upfront payments.

(a) The Commission may require applicants for licenses subject to competitive bidding to submit an upfront payment. In that event, the amount of the upfront payment and the procedures for submitting it will be set forth in a public notice. No interest will be paid on upfront payments.

(b) Upfront payments must be made by wire transfer.

(c) If the applicant does not submit at least the minimum upfront payment, it will be ineligible to bid, its application will be dismissed and any upfront payment it has made will be returned.

(d) The upfront payment(s) of a bidder will be credited toward any down payment required for licenses on which the bidder is the high bidder. Where the upfront payment amount exceeds the required deposit of a winning bidder, the Commission may refund the excess amount after determining that no bid withdrawal payments are owed by that bidder.

(e) In accordance with the provisions of paragraph (d) of this section, in the event a payment is assessed pursuant to section 27.203 for bid withdrawal or default, upfront payments or down payments on deposit with the Commission will be used to satisfy the bid withdrawal or default payment before being applied toward any additional payment obligations that the high bidder may have.

§ 27.206 Submission of down payment and filing of long-form applications.

(a) After bidding has ended, the Commission will identify and notify the high bidder and declare the bidding closed.

(b) Within ten (10) business days after being notified that it is a high bidder on a particular license(s), a high bidder must submit to the Commission's lockbox bank such additional funds (the "down payment") as are necessary to bring its total deposits (not including upfront payments applied to satisfy bid withdrawal or default payments) up to twenty (20) percent of its high bid(s). This down payment must be made by wire transfer or cashier's check drawn in U.S. dollars from a financial institution whose deposits are insured by the Federal Deposit Insurance Corporation and must be made payable to the Federal Communications Commission. Down payments will be held by the Commission until the high bidder has been awarded the license and has paid the remaining balance due on the license, in which case it will not be returned, or until the winning bidder is found unqualified to be a licensee or has defaulted, in which case it will be returned, less applicable payments. No interest will be paid on any down payment.

(c) A high bidder that meets its down payment obligations in a timely manner must, within ten (10) business days after being notified that it is a high bidder, submit an additional application (the "long-form application") pursuant to the rules governing the service in which the applicant is the high bidder. Notwithstanding any other provision in title 47 of the Code of Federal Regulations to the contrary, high bidders need not submit an additional application filing fee with their long-form applications. Notwithstanding any other provision in Title 47 of the Code of Federal Regulations to the contrary, the high bidder's long-form application must be mailed or otherwise delivered to: Office of the Secretary, Federal Communications Commission, Attention: Auction Application Processing Section, 1919 M Street, N.W., Room 222, Washington, D.C. 20554. An applicant that fails to submit the required long-form application as required under this subsection, and fails to establish good cause for any late-filed submission, shall be deemed to have defaulted and will be subject to the payments set forth in section 27.203.

(d) As an exhibit to its long-form application, the applicant must provide a detailed explanation of the terms and conditions and parties involved in any bidding consortia, joint venture, partnership or other agreement or arrangement it had entered into relating to the

competitive bidding process prior to the time bidding was completed. Such agreements must have been entered into prior to the filing of short-form applications pursuant to section 27.204.

§ 27.207 Procedures for filing petitions to deny against WCS long-form applications.

(a) Within five (5) days after the Commission gives public notice that a long-form application has been accepted for filing, petitions to deny that application may be filed. Any such petitions must contain allegations of fact supported by affidavit of a person or persons with personal knowledge thereof, and be served by hand upon the applicant or its representative.

(b) An applicant may file an opposition to any petition to deny within three (3) days after the deadline for filing petitions to deny. Allegations of fact or denials thereof must be supported by affidavit of a person or persons with personal knowledge thereof, and such opposition must be served by hand upon the petitioner.

(c) If the Commission determines that:

(1) An applicant is qualified and there is no substantial and material issue of fact concerning that determination, it will grant the application;

(2) An applicant is not qualified and that there is no substantial issue of fact concerning that determination, the Commission need not hold a evidentiary hearing and will deny the application; and

(3) Substantial and material issues of fact require a hearing, it will conduct a hearing. The Commission may permit all or part of the evidence to be submitted in written form and may permit employees other than administrative law judges to preside at the taking of written evidence. Such hearing will be conducted on an expedited basis.

Subpart E -- Application, Licensing, and Processing Rules for WCS

§ 27.301 Authorization required.

No person shall use or operate any device for the transmission of energy or communications by radio in the services authorized by this part except as provided in this part.

§ 27.302 Eligibility.

(a) General. Authorizations will be granted upon proper application if:

(1) The applicant is qualified under the applicable laws and the regulations, policies and decisions issued under those laws, including sections 27.101 and 27.12;

(2) There are frequencies available to provide satisfactory service; and

(3) The public interest, convenience or necessity would be served by a grant.

(b) Alien ownership. A WCS authorization to provide Commercial Mobile Radio Service may not be granted to or held by:

(1) Any alien or the representative of any alien;

(2) Any corporation organized under the laws of any foreign government;

(3) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or any corporation organized under the laws of a foreign country; or

(4) Any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country, if the Commission finds that the public interest will be served by the refusal or revocation of such license.

(c) A WCS authorization to provide Private Mobile Radio Service may not be granted to or held by a foreign government or a representative thereof.

§ 27.303 Formal and informal applications.

(a) Except for an authorization under any of the conditions stated in section 308(a) of the Communications Act of 1934 (47 U.S.C. 308(a)), the Commission may grant only upon written application received by it, the following authorization: station licenses; modifications of licenses; renewals of licenses; transfers and assignments of station licenses, or any right thereunder.

(b) Except as may be otherwise permitted by this part, a separate written application shall be filed for each instrument of authorization requested. Applications may be:

(1) "Formal applications" where the Commission has prescribed in this part a standard form;
or

(2) "Informal applications" (normally in letter form) where the Commission has not prescribed a standard form.

(c) An informal application will be accepted for filing only if:

(1) A standard form is not prescribed or clearly applicable to the authorization requested;

(2) It is a document submitted, in duplicate, with a caption which indicates clearly the nature of the request, radio service involved, location of the station, and the application file number (if known); and

(3) It contains all the technical details and informational showings required by the rules and states clearly and completely the facts involved and authorization desired.

§ 27.304 Filing of WCS applications, fees, and numbers of copies.

(a) As prescribed by sections 27.305 and 27.307, standard formal application forms applicable to the WCS may be obtained from either:

(1) Federal Communications Commission, Washington, DC 20554; or

(2) By calling the Commission's Forms Distribution Center, (202) 418-3676.

(b) Applications for the initial provision of WCS service must be filed on FCC Form 175 in accordance with the rules in sections 27.204 and 27.305 and part 1, subpart Q of this chapter. In the event of mutual exclusivity between applicants filing FCC Form 175, only auction winners will be eligible to file subsequent long form applications on FCC Form XXX for initial WCS licenses. Mutually exclusive applications filed on Form 175 are subject to competitive bidding under those rules. WCS applicants filing Form XXX need not complete Schedule B.

(c) All applications for WCS radio station authorizations (other than applications for initial provision of WCS service filed on FCC Form 175) shall be submitted for filing to: Federal Communications Commission, Washington, DC 20554, Attention: WCS Processing Section. Applications requiring fees as set forth at part 1, subpart G of this chapter must be filed in accordance with section 0.401(b) of this chapter.

(d) All correspondence or amendments concerning a submitted application shall clearly identify the name of the applicant, applicant identification number or Commission file number (if known) or station call sign of the application involved, and may be sent directly to the Wireless Telecommunications Bureau, Washington, DC 20554, WCS Processing Section.

(e) Except as otherwise specified, all applications, amendments, correspondence, pleadings and forms (with the exception of FCC Form 175, which is to be filed electronically pursuant to section 27.204) shall be submitted on one original paper copy and with three microfiche copies, including exhibits and attachments thereto, and shall be signed as prescribed by section 1.743 of this chapter. Unless otherwise provided by the FCC, filings of five pages or less are exempt from the requirement to submit on microfiche, as well as emergency filings like letters requesting special temporary authority. Those filing any amendments, correspondence, pleadings, and forms must simultaneously submit the original hard copy which must be stamped "original". In addition

to the original hard copy, those filing pleadings, including pleadings under section 1.2108 of this chapter shall also submit 2 paper copies as provided in section 1.51 of this chapter.

(1) Microfiche copies. Each microfiche copy must be a copy of the signed original. Each microfiche copy shall be a 148 mm 0A 105 mm negative (clear transparent characters appearing on an opaque background) at 240A to 270A reduction for microfiche or microfiche jackets. One of the microfiche sets must be a silver halide camera master or a copy made on silver halide film such as Kodak Direct Duplicatory Film. The microfiche must be placed in paper microfiche envelopes and submitted in a B6 (125 mm 0A 176 mm) or 5 0A 7.5 inch envelope. All applicants must leave Row "A" (the first row for page images) of the first fiche blank for in-house identification purposes.

(2) All applications and all amendments must have the following information printed on the mailing envelope, the microfiche envelope, and on the title area at the top of the microfiche:

- (i) The name of the applicant;
- (ii) The type of application (e.g. nationwide, regional, etc.);
- (iii) The month and year of the document;
- (iv) Name of the document;
- (v) File number, applicant identification number, and call sign, if assigned; and
- (vi) Each microfiche copy of pleadings shall include:
 - (A) The month and year of the document;
 - (B) Name of the document;
 - (C) Name of the filing party; and
 - (D) File number, applicant identification number, and call sign, if assigned;

§ 27.305 Standard application forms and permissive changes or minor modifications for the Wireless Communications Service.

(a) Applications for the initial provision of WCS service must be filed electronically on FCC Forms 175 and 175-S.

(b) Subsequent application by auction winners or non-mutually exclusive applicants for WCS radio station(s) under part 27. FCC Form XXX ("Application for New or Modified Wireless

Communications Service Under Part 27") shall be submitted by each auction winner for each WCS license applied for on FCC Form 175. In the event that mutual exclusivity does not exist between applicants filing FCC Form 175, the Commission will so inform the applicant and the applicant will also file FCC Form XXX. Blanket licenses are granted for each market frequency block. Applications for individual sites are not needed and will not be accepted. See section 27.11. WCS applicants filing Form XXX need not complete Schedule B.

§ 27.306 Miscellaneous forms.

(a) Licensee qualifications. FCC Form 430 ("Common Carrier and Satellite Radio Licensee Qualifications Report") shall be filed by Wireless Communications Service licensees only as required by Form 490 (Application for Assignment or Transfer of Control Under part 22 of this chapter).

(b) Renewal of station license. Except for renewal of special temporary authorizations, FCC Form 405 ("Application for Renewal of Station License") must be filed in duplicate by the licensee between thirty (30) and sixty (60) days prior to the expiration date of the license sought to be renewed.

§ 27.307 General application requirements.

(a) Each application (including applications filed on Forms 175 and XXX) for a radio station authorization or for consent to assignment or transfer of control in the WCS shall disclose fully the real party or parties in interest and must include the following information:

(1) A list of its subsidiaries, if any. Subsidiary means any business five per cent or more whose stock, warrants, options or debt securities are owned by the applicant or an officer, director, stockholder or key management personnel of the applicant. This list must include a description of each subsidiary's principal business and a description of each subsidiary's relationship to the applicant.

(2) A list of its affiliates, if any. Affiliates means any business which holds a five percent or more interest in the applicant, or any business in which a five percent or more interest is held by another company which holds a five percent interest in the applicant (e.g. Company A owns 5% of Company B and 5% of Company C; Companies B and C are affiliates).

(3) A list of the names, addresses, citizenship and principal business of any person holding five percent or more of each class of stock, warrants, options or debt securities together with the amount and percentage held, and the name, address, citizenship and principal place of business of any person on whose account, if other than the holder, such interest is held. If any of these persons are related by blood or marriage, include such relationship in the statement.

(4) In the case of partnerships, the name and address of each partner, each partner's citizenship and the share or interest participation in the partnership. This information must be provided for all partners, regardless of their respective ownership interests in the partnership. A signed and dated copy of the partnership agreement must be included in the application. This information must be included in Exhibit V of the application.

(b) Each application for a radio station authorization in the WCS must:

(1) Submit the information required by the Commission's rules, requests, and application forms;

(2) Be maintained by the applicant substantially accurate and complete in all significant respects in accordance with the provisions of section 1.65 of this chapter; and

(3) Show compliance with and make all special showings that may be applicable.

(c) Where documents, exhibits, or other lengthy showings already on file with the Commission contain information which is required by an application form, the application may specifically refer to such information, if:

(1) The information previously filed is over one A4 (21 cm x 29.7 cm) or 8.5 x 11 inch (21.6 cm x 27.9 cm) page in length, and all information referenced therein is current and accurate in all significant respects under section 1.65 of this chapter; and

(2) The reference states specifically where the previously filed information can actually be found, including mention of:

(i) The station call sign or application file number whenever the reference is to station files or previously filed applications; and

(ii) The title of the proceeding, the docket number, and any legal citations, whenever the reference is to a docketed proceeding. However, questions on an application form which call for specific technical data, or which can be answered by a "yes" or "no" or other short answer shall be answered as appropriate and shall not be cross-referenced to a previous filing.

(d) In addition to the general application requirements of subpart F of this part and section 1.2105 of this chapter, applicants shall submit any additional documents, exhibits, or signed written statements of fact:

(1) As may be required by these rules; and

(2) As the Commission, at any time after the filing of an application and during the term of any authorization, may require from any applicant, permittee, or licensee to enable it to determine whether a radio authorization should be granted, denied, or revoked.

(e) Except when the Commission has declared explicitly to the contrary, an informational requirement does not in itself imply the processing treatment of decisional weight to be accorded the response.

(f) All applicants (except applicants filing FCC Form 175) are required to indicate at the time their application is filed whether or not a Commission grant of the application may have a significant environmental impact as defined by section 1.1307 of this chapter. If answered affirmatively, the requisite environmental assessment as prescribed in section 1.1311 of this chapter must be filed with the application and Commission environmental review must be completed prior to construction. See section 1.1312 of this chapter. All WCS licensees are subject to a continuing obligation to determine whether subsequent construction may have a significant environmental impact prior to undertaking such construction and to otherwise comply with sections 1.1301 through 1.1319 of this chapter. See section 1.1312 of this chapter.

§ 27.308 Technical content of applications; maintenance of list of station locations.

All applications required by this part shall contain all technical information required by the application forms or associated public notice(s). Applications other than initial applications for a WCS license must also comply with all technical requirements of the rules governing the WCS (see subparts C and D as appropriate).

§27.310 Waiver of rules.

(a) Request for waivers.

(1) Waivers of these rules may be granted upon application or by the Commission on its own motion. Requests for waivers shall contain a statement of reasons sufficient to justify a waiver. Waivers will not be granted except upon an affirmative showing:

(i) That the underlying purpose of the rule will not be served, or would be frustrated, by its application in a particular case, and that grant of the waiver is otherwise in the public interest; or

(ii) That the unique facts and circumstances of a particular case render application of the rule inequitable, unduly burdensome or otherwise contrary to the public interest. Applicants must also show the lack of a reasonable alternative.

(2) If the information necessary to support a waiver request is already on file, the applicant may cross-reference to the specific filing where it may be found.

(b) Denial of waiver, alternate showing required. If a waiver is not granted, the application will be dismissed as defective unless the applicant has also provided an alternative proposal which complies with the Commission's rules (including any required showings).

§ 27.311 Defective applications.

(a) Unless the Commission shall otherwise permit, an application will be unacceptable for filing and will be returned to the applicant with a brief statement as to the omissions or discrepancies if:

(1) The application is defective with respect to completeness of answers to questions, informational showings, execution, or other matters of a formal character; or

(2) The application does not comply with the Commission's rules, regulations, specific requirements for additional information or other requirements. See also section 1.2105 of this chapter.

(b) Some examples of common deficiencies which result in defective applications under paragraph (a) of this section are:

(1) The application is not filled out completely and signed; or

(2) The application (other an application filed on FCC Form 175) does not include an environmental assessment as required for an action that may have a significant impact upon the environment, as defined in section 1.1307 of this chapter.

(3) The application is filed prior to the public notice issued under section 27.317 announcing the application filing date for the relevant auction or after the cutoff date prescribed in that public notice;

(c) If an applicant is requested by the Commission to file any documents or any supplementary or explanatory information not specifically required in the prescribed application form, a failure to comply with such request within a specified time period will be deemed to render the application defective and will subject it to dismissal.

§ 27.312 Inconsistent or conflicting applications.

While an application is pending and undecided under part 27, no subsequent inconsistent or conflicting application may be filed by the same applicant, his successor or assignee, or on behalf or for the benefit of the same applicant, his successor or assignee.

§ 27.313 Amendment of applications for Wireless Communications Service (other than applications filed on FCC Form 175).

This section applies to all applications for Wireless Communications Service other than applications filed on FCC Form 175.

(a) Amendments as of right. A pending application may be amended as a matter of right if the application has not been designated for hearing.

(1) Amendments shall comply with section 27.319, as applicable; and

(2) Amendments which resolve interference conflicts or amendments under section 27.319 may be filed at any time.

(b) The Commission or the presiding officer may grant requests to amend an application designated for hearing only if a written petition demonstrating good cause is submitted and properly served upon the parties of record.

(c) Major amendments, minor amendments. The Commission will classify all amendments as minor except in the cases listed below. An amendment shall be deemed to be a major amendment subject to section 27.317 under any of the following circumstances:

(1) Change in technical proposal. If the amendment results in a substantial change in the engineering proposal such as (but not necessarily limited to) a change in, or an addition of, a radio frequency;

(2) Amendment to proposed service area. If the amendment extends the reliable service area of the proposed facilities outside its EA or other applicable market area as defined in section 27.102; or

(3) A substantial change in ownership or control.

(d) If a petition to deny (or other formal objection) has been filed, any amendment, requests for waiver, (or other written communications) shall be served on the petitioner by hand, unless waiver of this requirement is granted pursuant to paragraph (e) of this section. See also section 1.2108 of this chapter.

(e) The Commission may waive the service requirements of paragraph (d) of this section and prescribe such alternative procedures as may be appropriate under the circumstances to protect petitioners' interests and to avoid undue delay in a proceeding, if an applicant submits a request for waiver which demonstrates that the service requirement is unreasonably burdensome.

(f) Any amendment to an application shall be signed and shall be submitted in the same manner, and with the same number of copies, as was the original application. Amendments may be made in letter form if they comply in all other respects with the requirements of this chapter.

(g) An application will be considered to be a newly filed application if it is amended by a major amendment (as defined in this section), except in the following circumstances:

(1) The amendment reflects only a change in ownership or control found by the Commission to be in the public interest;

(2) The amendment corrects typographical transcription, or similar clerical errors which are clearly demonstrated to be mistakes by reference to other parts of the application, and whose discovery does not create new or increased frequency conflicts;

(3) The amendment does not create new or increased frequency conflicts, and is demonstrably necessitated by events which the applicant could not have reasonably foreseen at the time of filing, such as, for example:

(i) The loss of a transmitter or receiver site by condemnation, natural causes, or loss of lease or option; or

(ii) Obstruction of a proposed transmission path caused by the erection of a new building or other structure.

§ 27.314 Application for temporary authorizations.

(a) In circumstances requiring immediate or temporary use of facilities, request may be made for special temporary authority to install and/or operate new or modified equipment. Any such request may be submitted as an informal application in the manner set forth in section 27.303 and must contain full particulars as to the proposed operation including all facts sufficient to justify the temporary authority sought and the public interest therein. No such request will be considered unless the request is received by the Commission at least 10 days prior to the date of proposed construction or operation or, where an extension is sought, expiration date of the existing temporary authorization. A request received within less than 10 days may be accepted upon due showing of sufficient reasons for the delay in submitting such request.

(b) Special temporary authorizations may be granted without regard to the 30-day public notice requirements of section 27.317 when:

(1) The authorization is for a period not to exceed 30 days and no application for regular operation is contemplated to be filed;

(2) The authorization is for a period not to exceed 60 days pending the filing of an application for such regular operation;

(3) The authorization is to permit interim operation to facilitate completion of authorized construction or to provide substantially the same service as previously authorized; or

(4) The authorization is made upon a finding that there are extraordinary circumstances requiring operation in the public interest and that delay in the institution of such service would seriously prejudice the public interest.

(c) Temporary authorizations of operation not to exceed 180 days may be granted under the standards of section 309(f) of the Communications Act where extraordinary circumstances so require. Extensions of the temporary authorization for a period of 180 days each may also be granted, but the renewal applicant bears a heavy burden to show that extraordinary circumstances warrant such an extension.

(d) In cases of emergency found by the Commission, involving danger to life or property or due to damage of equipment, or during a national emergency proclaimed by the president or declared by the Congress or during the continuance of any war in which the United States is engaged and when such action is necessary for the national defense or safety or otherwise in furtherance of the war effort, or in cases of emergency where the Commission finds that it would not be feasible to secure renewal applications from existing licensees or otherwise to follow normal licensing procedure, the Commission will grant radio station authorizations and station licenses, or modifications or renewals thereof, during the emergency found by the Commission or during the continuance of any such national emergency or war, as special temporary licenses, only for the period of emergency or war requiring such action, without the filing of formal applications.

§ 27.316 Receipt of application; applications in the Wireless Communications Service filed on FCC Form 175 and other applications in the WCS Service.

(a) All applications for the initial provision of WCS service must be submitted by means of electronic filing on FCC Forms 175 and 175-S. Mutually exclusive initial applications in the Wireless Communications Service are subject to competitive bidding. FCC Form XXX ("Application for New or Modified Subscription Radio Service Radio Station Under Part 27") must be submitted by each winning bidder for each WCS license applied for on FCC Form 175. In the event that mutual exclusivity does not exist between applicants filing FCC Form 175, the applicant will also file FCC Form 401. The aforementioned Forms 175, 175-S, and XXX are subject to the provisions of part 1, subpart Q of this chapter ("Competitive Bidding Proceedings") and subpart D of this part. Blanket licenses are granted for each market frequency block. Applications for individual sites are not needed and will not be accepted. See section 27.11.

(b) Applications received for filing are given a file number. The assignment of a file number to an application is merely for administrative convenience and does not indicate the acceptance of the application for filing and processing. Such assignment of a file number will not preclude the subsequent return or dismissal of the application if it is found to be defective or not in accordance with the Commission's rules.

(c) Acceptance of an application for filing merely means that it has been the subject of a preliminary review as to completeness. Such acceptance will not preclude the subsequent return or dismissal of the application if it is found to be defective or not in accordance with the Commission's rules.

§ 27.317 Public notice period.

(a) At regular intervals, the Commission will issue a public notice listing:

- (1) The acceptance for filing of all applications and major amendments thereto;
- (2) Significant Commission actions concerning applications listed as acceptable for filing;

(3) Information which the Commission in its discretion believes of public significance. Such notices are solely for the purpose of informing the public and do not create any rights in an applicant or any other person; or

(4) Special environmental considerations as required by part 1 of this chapter.

(b) The Commission will not grant any application until expiration of a period of seven (7) days following the issuance date of a public notice listing the application, or any major amendments thereto, as acceptable for filing. Provided, that the Commission will not grant an application filed on Form XXX filed either by a winning bidder or by an applicant whose Form 175 application is not mutually exclusive with other applicants, until the expiration of a period of forty (40) days following the issuance of a public notice listing the application, or any major amendments thereto, as acceptable for filing. See also section 27.207.

(c) As an exception to paragraphs (a)(1), (a)(2) and (b) of this section, the public notice provisions are not applicable to applications:

(1) For authorization of a minor technical change in the facilities of an authorized station where such a change would not be classified as a major amendment (as defined by section 27.314) were such a change to be submitted as an amendment to a pending application;

(2) For issuance of a license subsequent to a radio station authorization or, pending application for a grant of such license, any special or temporary authorization to permit interim operation to facilitate completion of authorized construction or to provide substantially the same service as would be authorized by such license;

(3) For extension of time to complete construction of authorized facilities, see section 27.104;

(4) For temporary authorization pursuant to section 27.315;

(5) For an authorization under any of the proviso clauses of section 308(a) of the Communications Act of 1934 (47 U.S.C. 308(a));

(6) For consent to an involuntary assignment or transfer of control of a radio authorization;
or

(7) For consent to a voluntary assignment or transfer of control of a radio authorization, where the assignment or transfer does not involve a substantial change in ownership or control.

§ 27.318 Dismissal and return of applications.

(a) Any application may be dismissed without prejudice as a matter of right if the applicant requests its dismissal prior to designation for hearing or, in the case of applications filed on Forms 175 and 175-S, prior to auction. An applicant's request for the return of his application after it has been accepted for filing will be considered to be a request for dismissal without prejudice. Applicants requesting dismissal of their applications are also subject to section 1.2104 of this chapter.

(b) A request to dismiss an application without prejudice will be considered after designation for hearing only if:

(1) A written petition is submitted to the Commission and is properly served upon all parties of record; and

(2) The petition complies with the provisions of this section and demonstrates good cause.

(c) The Commission will dismiss an application for failure to prosecute or for failure to respond substantially within a specified time period to official correspondence or requests for additional information. Dismissal shall be without prejudice if made prior to designation for hearing or prior to auction, but dismissal may be made with prejudice for unsatisfactory compliance or after designation for hearing or after the applicant is notified that it is the winning bidder under the auction process.

§ 27.319 Ownership changes and agreements to amend or to dismiss applications or pleadings.

(a) Applicability. Subject to the provisions of § 1.2105 of this chapter (Bidding Application and Certification Procedures; Prohibition of Collusion), this section applies to applicants and all other parties interested in pending applications who wish to resolve contested matters among themselves with a formal or an informal agreement or understanding. This section applies only when the agreement or understanding will result in:

(1) A major change in the ownership of an applicant to which §§ 27.313(c) and 27.313(g) apply or which would cause the applicant to lose its status as a designated entity under § 27.XXX, or

(2) The individual or mutual withdrawal, amendment or dismissal of any pending application, amendment, petition or other pleading.

(b) The provisions of § 22.129 of the Commission's Rules will apply in the event of the filing of petitions to deny or other pleadings or informal objections filed against WCS applications. The provisions of § 22.129 of the Commission's Rules will apply in the event of dismissal of WCS applications. The provisions of § 22.129(c) of the Commission's Rules will apply in the event of threats to file petitions to deny or other pleadings or informal objections against WCS applications.

§ 27.320 Opposition to applications.

(a) Petitions to deny (including petitions for other forms of relief) and responsive pleadings for Commission consideration must comply with section 27.207 and must:

(1) Identify the application or applications (including applicant's name, station location, Commission file numbers and radio service involved) with which it is concerned;

(2) Be filed in accordance with the pleading limitations, filing periods, and other applicable provisions of sections 1.41 through 1.52 of this chapter except where otherwise provided in section 27.207;

(3) Contain specific allegations of fact which, except for facts of which official notice may be taken, shall be supported by affidavit of a person or persons with personal knowledge thereof, and which shall be sufficient to demonstrate that the petitioner (or respondent) is a party in interest and that a grant of, or other Commission action regarding, the application would be prima facie inconsistent with the public interest;

(4) Be filed within five (5) days after the date of public notice announcing the acceptance for filing of any such application or major amendment thereto (unless the Commission otherwise extends the filing deadline); and

(5) Contain a certificate of service showing that it has been hand delivered to the applicant no later than the date of filing thereof with the Commission.

(b) A petition to deny a major amendment to a previously filed application may only raise matters directly related to the amendment which could not have been raised in connection with the underlying, previously filed application. This does not apply to petitioners who gain standing because of the major amendment.

(c) Parties who file frivolous petitions to deny may be subject to sanctions including monetary forfeitures, license revocation, if they are FCC licensees, and may be prohibited from participating in future auctions.

§ 27.321 Mutually exclusive applications.

(a) The Commission will consider applications to be mutually exclusive if their conflicts are such that the grant of one application would effectively preclude by reason of harmful electrical interference, or other practical reason, the grant of one or more of the other applications. The Commission will presume "harmful electrical interference" to mean interference which would result in a material impairment to service rendered to the public despite full cooperation in good faith by all applicants or parties to achieve reasonable technical adjustments which would avoid electrical conflict.

(b) Mutually exclusive applications filed on Form 175 for the initial provision of WCS service are subject to competitive bidding in accordance with the procedures in subpart F of this part and in part 1, subpart Q of this chapter.

(c) An application will be entitled to comparative consideration with one or more conflicting applications only if the Commission determines that such comparative consideration will serve the public interest.

§ 27.322 Consideration of applications.

(a) Applications for an instrument of authorization will be granted if, upon examination of the application and upon consideration of such other matters as it may officially notice, the Commission finds that the grant will serve the public interest, convenience, and necessity. See also section 1.2108 of this chapter.

(b) The grant shall be without a formal hearing if, upon consideration of the application, any pleadings or objections filed, or other matters which may be officially noticed, the Commission finds that:

(1) The application is acceptable for filing, and is in accordance with the Commission's rules, regulations, and other requirements;

(2) The application is not subject to a post-auction hearing or to comparative consideration pursuant to section 27.322 with another application(s);

(3) A grant of the application would not cause harmful electrical interference to an authorized station;

(4) There are no substantial and material questions of fact presented; and

(5) The applicant is qualified under current FCC regulations and policies.

(c) If the Commission should grant without a formal hearing an application for an instrument of authorization which is subject to a petition to deny filed in accordance with section 27.319, the Commission will deny the petition by the issuance of a Memorandum Opinion and Order which will concisely report the reasons for the denial and dispose of all substantial issues raised by the petition.

(d) Whenever the Commission, without a formal hearing, grants any application in part, or subject to any terms or conditions other than those normally applied to applications of the same type, it shall inform the applicant of the reasons therefor, and the grant shall be considered final unless the Commission should revise its action (either by granting the application as originally requested, or by designating the application for a formal evidentiary hearing) in response to a petition for reconsideration which:

(1) Is filed by the applicant within thirty (30) days from the date of the letter or order giving the reasons for the partial or conditioned grant;

(2) Rejects the grant as made and explains the reasons why the application should be granted as originally requested; and,

(3) Returns the instrument of authorization.

(e) The Commission will designate an application for a formal hearing, specifying with particularity the matters and things in issue, if, upon consideration of the application, any pleadings or objections filed, or other matters which may be officially noticed, the Commission determines that:

(1) A substantial and material question of fact is presented (see also section 1.2108 of this chapter);

(2) The Commission is unable for any reason to make the findings specified in paragraph (a) of this section and the application is acceptable for filing, complete, and in accordance with the Commission's rules, regulations, and other requirements; or

(3) The application is entitled to comparative consideration (under section 27.321) with another application (or applications).

(f) The Commission may grant, deny or take other action with respect to an application designated for a formal hearing pursuant to paragraph (e) of this section or part 1 of this chapter.

(g) Reconsideration or review of any final action taken by the Commission will be in accordance with part 1, subpart A of this chapter.

§ 27.323 Post-auction divestitures.

Any parties sharing a common non-controlling ownership interest who aggregate more WCS spectrum among them than a single entity is entitled to hold will be permitted to divest sufficient properties within 90 days of the license grant to come into compliance with the spectrum aggregation limits as follows:

(a) The WCS applicant shall submit a signed statement with its long-form application stating that sufficient properties will be divested within 90 days of the license grant. If the licensee is otherwise qualified, the Commission will grant the applications subject to a condition that the licensee come into compliance with the WCS spectrum aggregation limits within 90 days of grant.

(b) Within 90 days of license grant, the licensee must certify that the applicant and all parties to the application have come into compliance with the WCS spectrum aggregation limits. If the licensee fails to submit the certification within 90 days, the Commission will immediately cancel all broadband WCS licenses won by the applicant, impose the default payment and, based on the facts presented take any other action it may deem appropriate. Divestiture may be to an interim trustee if a buyer has not been secured in the required time frame, as long as the applicant has no interest in or control of the trustee, and the trustee may dispose of the property as it sees fit. In no event may the trustee retain the property for longer than six months from grant of license.

§ 27.324 Transfer of control or assignment of station authorization.

(a) Authorizations shall be transferred or assigned to another party, voluntarily (for example, by contract) or involuntarily (for example, by death, bankruptcy, or legal disability), directly or indirectly or by transfer of control of any corporation holding such authorization, only upon application and approval by the Commission. A transfer of control or assignment of station authorization in the Wireless Communications Service is also subject to section 1.2111 of this chapter (Assignment or transfer of control: unjust enrichment)

(1) A change from less than 50% ownership to 50% or more ownership shall always be considered a transfer of control.

(2) In other situations a controlling interest shall be determined on a case- by-case basis considering the distribution of ownership, and the relationships of the owners, including family relationships.

(b) Form required:

(1) Assignment.

- (i) FCC Form 490 shall be filed to assign a license or permit.
- (ii) In the case of involuntary assignment, FCC Form 490 shall be filed within 30 days of the event causing the assignment.
- (2) Transfer of control.
 - (i) FCC Form 490 shall be submitted in order to transfer control of a corporation holding a license or permit.
 - (ii) In the case of involuntary transfer of control, FCC Form 490 shall be filed within 30 days of the event causing the transfer.
- (3) Form 430. Whenever an application must be filed under paragraphs (a)(1) or (a)(2) of this section, the assignee or transferee shall file FCC Form 430 ("Common Carrier Radio License Qualification Report") unless an accurate report is on file with the Commission.
- (4) Notification of completion. The Commission shall be notified by letter of the date of completion of the assignment or transfer of control.
- (5) If the transfer of control of a license is approved, the new licensee is held to the original build-out requirement of section 27.104.
- (c) In acting upon applications for transfer of control or assignment, the Commission will not consider whether the public interest, convenience, and necessity might be served by the transfer or assignment of the authorization to a person other than the proposed transferee or assignee.
- (d) Applicants seeking to transfer their licenses within three years after the initial license grant date are required to file, together with their transfer application, the associated contracts for sale, option agreements, management agreements, and all other documents disclosing the total consideration to be received in return for the transfer of the license.

§ 27.325 Termination of authorization.

- (a)(1) All authorizations shall terminate on the date specified on the authorization or on the date specified by these rules, unless a timely application for renewal has been filed.
- (2) If no application for renewal has been made before the authorization's expiration date, a late application for renewal will only be considered if it is filed within 30 days of the expiration date and shows that the failure to file a timely application was due to causes beyond the applicant's control. During this 30 day period reinstatement applications must be filed on FCC Form 489. Service to subscribers need not be suspended while a late filed renewal application is pending, but such service shall be without prejudice to Commission action on the renewal

application and any related sanctions. See also section 27.14 (Criteria for Comparative Renewal Proceedings).

(b) Special Temporary Authority. A special temporary authorization shall automatically terminate upon failure to comply with the conditions in the authorization.

PART 97 -- AMATEUR RADIO SERVICE

1. The authority citation for part 97 continues to read as follows:

AUTHORITY: 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. 151-155, 301-609, unless otherwise noted.

2. Section 97.303(j)(2) is revised to read as follows:

§ 97.303 Frequency sharing requirements.

* * * * *

(j) * * *

(2) The 2300-2310 MHz segment is allocated to the amateur service on a secondary basis. The 2390-2400 MHz and 2402-2417 MHz segments are allocated to the amateur service on a primary basis. No amateur station transmitting in the 2400-2450 MHz segment is protected from interference due to the operation of industrial, scientific, and medical devices on 2450 MHz.

* * * * *

**Separate Statement
of
Commissioner James H. Quello**

November 12, 1996

*Re: In the Matter of Amendment of the Commission's Rules to Establish Part 27,
the Wireless Communications Service, GN Docket No. 96-228*

The underlying statutory basis for this *Notice of Proposed Rulemaking* is unusual in several respects. Significantly, the relevant sections of the Omnibus Consolidated Appropriations Act of 1997 are highly specific. Congress directed the Federal Communications Commission to reallocate the 2305-2320 and 2345-2360 MHz frequency bands to wireless service and to assign the use of such frequencies by auction.¹ Furthermore, I am mindful that, for the first time, Congress directed this Commission to take into account the communications needs of the public safety providers.² Accordingly, we draw very few tentative conclusions; instead, we seek comment on many alternative proposals and invite suggestions for other regulatory schema. We are issuing this NPRM at this time to comply with corollary statutory requirements that the FCC begin the auction of these frequencies by no later than April 15, 1997 and ensure that all proceeds be deposited by no later than September 30, 1997.³

Although I support the issuance of this NPRM as the initial step in creating the new Wireless Communications Service, I write separately to reiterate my concern that other Commission processes, including licensing of other wireless services for which auctions have already been concluded, not be impeded or delayed. I refer, specifically, to the licensing of the successful bidders in the "C block" PCS auctions. Moreover, I note that we will soon begin licensure of the D, E, and F Block PCS winners.

This Commission is in the middle of assigning significant amounts of new spectrum to potentially competitive wireless communications service providers. Accordingly, we must ensure to the extent possible that any decisions we make, including the creation of new potentially competitive services not prejudice existing licensees by suggesting that we have somehow predetermined winners and losers by deeming one service or other more deserving of regulatory flexibility or beneficence. For this reason, I emphasize that this NPRM is intentionally very general. We earnestly seek guidance on the best use of this spectrum and the most efficient and efficacious

¹ *See supra* at Section II, subpart A.

² *Id.* at paras. 19-22.

³ *Id.* at Section II, subpart A.

regulatory regime, *e.g.*, the size of service areas and spectrum blocks, within the statutory strictures.